INDUSTRY COMMISSION

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Chapter 1
The Industry Commission

The establishment of the Industry Commission in March this year gives new impetus to economic reform efforts at all levels of government in Australia. The Commission is the Commonwealth Government's major review and inquiry body on structural reform.

The rationale for forming the Commission was stated in the following terms:

> 'the establishment of the Industry Commission represents the Government's continued commitment to . . . transparency and full community debate in the development of policies relating to industry. The Commission is intended to make a major contribution to further structural reform in Australia. It will be a catalyst for productivity and efficiency gains, and thereby lay the groundwork for income and employment growth and security' (Morris 1989, p. 2427).

The Industry Commission has absorbed functions previously performed by the Industries Assistance Commission (IAC) on industry assistance and related matters, the Inter-State Commission (ISC) on interstate transport matters, and the Commonwealth's Business Regulation Review Unit on regulation review. Distinguishing characteristics which the Industry Commission inherits from its constituent bodies are:

- its independence from executive and administrative responsibilities for industry regulation and assistance;
- open and public inquiry processes which encourage public participation in policy formulation and maximise public scrutiny of requests and policy advice;
- an operating framework which requires it to report and advise on industry matters from the perspective of the community as a whole rather than the interest of any particular industry or community group; and
- in addition to the specific industry matters referred to it for advice, the obligation to report generally on the economic performance of industry and the effects of regulation and assistance on industry and the economy.

The Industry Commission is expected to build on the earlier work of the IAC 'which was instrumental in awakening the community to the costs of many industry assistance policies' (Morris 1989, p. 2424). With a broadened charter and new guidelines and reporting requirements, the Government intends the Commission to play a central role in the ongoing processes of structural reform to improve productivity.

Reform is seldom easy. In spite of net benefits for the wider community, there is usually strong opposition to change from those adversely affected by it and often from the architects of existing industry arrangements. Important roles for the Industry Commission lie in:

- identifying economic inefficiencies;
- assessing and, where possible, quantifying their costs to the community;
- building community awareness of these costs and the scope for improved industry performance; and
- identifying practical ways to reduce the costs of existing arrangements and so provide the community with higher standards of living.

The Industry Commission has a wide-ranging charter. Business activity and industry in any sector of the economy fall within the Commission's purview. So too do Commonwealth, State and Territory Government actions relating to industry. This enables the Commission to report on actions at any level of government which affect the performance of any industry. Given the pervasive influence of the States in determining the institutional and regulatory framework for industry, their cooperation in broad-based microeconomic reform is crucial.

The Government has provided policy guidelines for the Commission. These are cast in terms of encouraging the development of internationally competitive industries, facilitating structural adjustment, and reducing unnecessary industry regulation. The Commission must also report on environmental and social considerations so that these are incorporated in decision-making processes. In all its work, the Commission brings an economy-wide perspective to bear — one which takes account of the interrelationships between industries, consumers and taxpayers.

The Commission's public inquiries play an important role in identifying opportunities for improved industry performance and testing the claims of those defending existing industry arrangements or proposing change. The Commission actively seeks the cooperation and involvement of all those who can contribute to policy formulation. Public inquiries also enhance wider community awareness and understanding of industry issues. Likewise, the Commission's annual reports and other general reporting aim to inform Australians of what is at stake in improving industry performance.

In this first annual report of the Industry Commission, the focus is on the need for higher productivity, the scope for better performance from Australian industry and means by which it can best be achieved.

Chapter 2
The need for higher productivity

Growth in Australia's material standard of living has not kept pace with that of other nations. The economy has been burdened with persistent inflation, a build up of foreign debt and, despite strong employment growth, continuing unemployment. Accompanying this, pressures to pursue social and environmental objectives have intensified. The demands have grown, outstripping what our constrained economy can deliver.

We need to lift our productivity performance if community aspirations are to be met. More output from the same input of resources means that we can raise our material standard of living without borrowing more or placing undue demands on the environment.

Changes in the terms of trade — the ratio of export to import prices — also condition our capacity to increase living standards. In recent years, productivity increases and favourable movements in the terms of trade have worked together to lift our capacity to raise living standards (appendix 2). But the constraints that the Australian economy currently faces leave us particularly vulnerable to a turnaround in world commodity prices. If the terms of trade decline — and the latest figures indicate this may already be underway — our ability to maintain living standards will come under strong pressure. This pressure will be accentuated by the rising proportion of exports needed to meet our debt commitments.

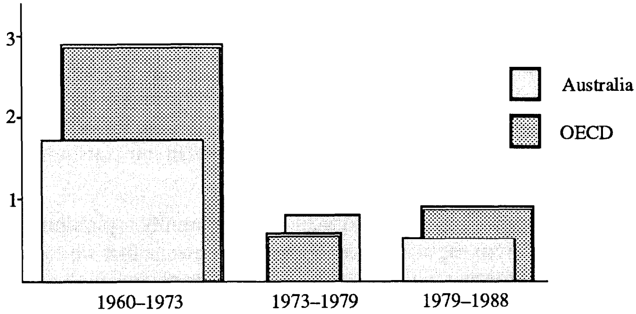
We do not have much influence over world prices. To reduce our vulnerability we need to take urgent and sustained action to raise our productivity performance.

The performance of Australian industry

Comparisons by the OECD show that, apart from the period between the two oil shocks, Australia's productivity *growth* has been below the average for the OECD (figure 1). As to productivity *levels*, OECD estimates for the period 1970 to 1985 show agriculture as the only Australian sector performing better than in other OECD countries. (The OECD does not separately identify the mining sector which other studies show has high productivity.) Electricity, gas and water utilities combined were estimated to have productivity levels less than half those of OECD countries (OECD 1990a).

Figure 1
Productivity in Australia and the OECD

Average annual percentage rate of change



Source: OECD (1990b).

We should not judge our performance against the standard of the past. We must consider what other countries are achieving. If we do this we can also obtain valuable insights as to how to improve our own performance and learn from their mistakes.

Reform in other countries

A number of countries have instituted programs of reform to stimulate productivity growth. The OECD recently stated that:

> 'It is clear that during these last two years substantial further progress has been achieved in structural reform — and all Member countries have participated in the process' (OECD 1990c, p. 7).

The extent of progress has varied from country to country because of 'different points of departure as well as differing reform efforts'. Most progress has been made in areas such as: deregulation of financial markets; lifting foreign investment restrictions; taxation reform; and policies to increase competition. Deregulation and privatisation have continued in all OECD countries, especially in transport and communications. The OECD concluded that 'even those countries which might have preferred to move more slowly have had to join the process of reform in order to avoid compromising their competitiveness' (p. 7).

Our own region has some of the most dynamic and adaptive economies in the world (appendix 4). The dynamic Asian economies — Hong Kong, Korea, Malaysia, Taiwan, Thailand and Singapore — have been growing at annual rates typically in the range of 6 per cent to 12 per cent (OECD 1990b, p. 38). They recognise that removing impediments to efficient production yields significant benefits. The World Bank (1989) has reported that:

> 'Over the past year the reform process and expanding international and regional trade have helped a number of Asian countries either to meet or exceed expectations in terms of their growth performance' (p. 114).

The Republic of Korea has undergone financial and trade liberalisation. Large reductions in tariffs on many manufactured items and some agricultural commodities have already occurred and these are to be followed by another round of reductions in 1991. In Taiwan, tariff reductions were announced in 1985 with, for example, the tariff on cars being reduced from 60 per cent to 30 per cent by the end of 1990.

Since 1985 the Indonesian Government has followed a wide-ranging program of microeconomic reform, including the sale of state-owned enterprises, financial deregulation, and reductions in border protection. Extensive reforms in the maritime sector removed virtually all restrictions on entry by domestic and foreign shipping lines. The economy responded strongly to these reforms, enabling it to overcome a severe deterioration in the terms of trade caused by falling oil prices. Non-oil exports underpinned growth in GDP of 4.7 per cent in 1988 (World Bank 1989).

Also close to home, New Zealand is well under way on a wide-ranging reform program. There has been significant trade liberalisation since 1984, financial liberalisation, and deregulation of areas such as road haulage, petrol distribution and certain occupations. Reforms in the public service have blended greater accountability with greater autonomy (for example, over terms and conditions of staff) and relaxed institutional procedures (for example, purchasing) to allow more private-sector competition. There has been a program of corporatisation and privatisation of public enterprises and moves to introduce more competition. Examples include telecommunications, waterfront, railways, forestry, electricity, banking and postal services. Productivity has improved dramatically in all these activities (OECD 1989b).

Trade developments

Changing trading relationships between countries will also have implications for Australia. The results of the current Uruguay Round of multilateral trade negotiations will affect world markets in a range of services as well as goods and could greatly benefit Australia. A key question is whether genuine, substantial liberalisation occurs in agriculture. Unless agricultural policies are reformed, particularly in Europe, Japan and the USA, the prospects for growth in Australia's commodity exports will remain constrained. Our vulnerability to a deterioration in the terms of trade will increase. It is also important that progress be made on other natural resource-based products such as coal.

A parallel development of significance for Australia is the growth and consolidation of regional trading arrangements. A single European market in 1992 and the Canada–United States Free Trade Agreement are prime examples. These arrangements have the potential to be a positive force for growth within regions and possibly for world trade growth, but there is also a risk that intra-bloc liberalisation will occur at the cost of increased barriers to the exports of 'outsiders'.

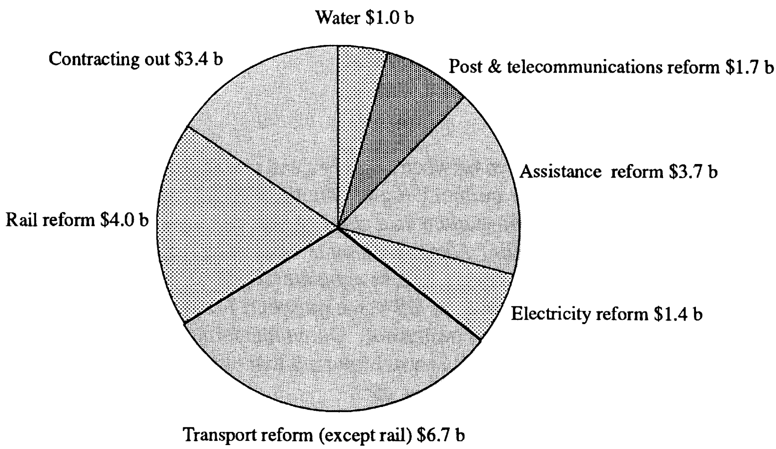
A further development in international trading relationships is the opening up of Eastern Europe and its closer integration with the West. Fundamental changes to capital and trade flows are inevitable.

These factors all contribute to uncertainty about the future development of foreign trade. They make it all the more important that we continue to find ways of raising our productivity and improving our competitiveness, so that we can make the best of our opportunities.

The potential for improvements in Australia

In its 1988–89 Annual Report, the IAC identified a number of reforms in transport, communications, electricity supply and reductions in manufacturing and agricultural assistance which in the longer run could produce annual GDP gains of $16 billion. This analysis has been expanded to include the long-run gains from reforms in the provision of water services and contracting out part of public sector activity concerned with catering, maintenance and capital works. New estimates of the gains from rail reform are also included. In the longer run, the combined package of measures is estimated to generate a permanent increase of $22 billion in GDP and a net addition of 53 000 jobs (appendix 1). The reforms would allow the

Figure 2
Origins of annual output gains from certain microeconomic reforms



Source: Commission estimates, see appendix 1.

average household to raise spending by $2300 a year without any net adverse effects on the current account. It is estimated there would also be a 7 per cent reduction in the price level. In areas such as transport and electricity, some action is already underway to achieve gains.

The estimated gains are large in themselves, but the potential importance of what has been left out reinforces the view that the scope for productivity gains is very substantial. The reform initiatives identified do not cover such areas as health and education, construction, and taxation. And while the analysis includes some productivity gains from improved labour practices, it does not include the substantial gains that could accompany general labour market reform. Furthermore, the analysis does not allow for ongoing 'dynamic' gains from the reform process that could increase the underlying *rate* of growth in GDP.

The gains from reform could be tapped in a number of ways. For example, while the reforms may not directly affect the trade deficit and debt build up, they bring an additional capacity that could be used to increase savings, reduce the trade deficit and retire debt.

But reforms take time to implement and the gains take time to work through. The quicker we move, the sooner we will benefit.

Chapter 3
Securing higher productivity

To secure improvements in productivity, individuals — whether they work on their own account or in private firms, public utilities, schools and universities, or government departments — need to face the right incentives. Those incentives are primarily conveyed through prices for goods, services, labour, capital and natural resources.

Relative prices and the means by which they are determined are the coordinating mechanism which shapes economic development. Revelations of poor performance in Eastern Europe have underlined the importance of having markets to perform this function, so that prices truly reflect what people want and the capacity of suppliers to deliver. Well defined property rights, a body of law to enforce them and markets in which to trade them are crucial.

For much of our history, governments have deliberately distorted the incentives that the market place would otherwise provide to large sections of the economy. Decision makers in both the private and public sectors have been given a misleading picture of what consumers and using industries were truly willing to pay for the goods and services they produce. For example, once government formed a vision that Australia needed a diversified and sizeable manufacturing sector, the normal market incentives were set aside. Tariff and other assistance was provided to enable local producers to gain market share against imports. Through protection from foreign competition and the establishment and tolerance of public and private monopolies, governments have blunted the rewards and disciplines that competition provides.

Effective competition is critical in ensuring that markets convey the right incentives. It is vital to improved productivity performance. Competition not only keeps costs down, it ensures the benefits are passed on to consumers and it provides strong incentives for production to match evolving consumer requirements. It provides rewards for doing things better and discipline for failing to do so.

Nevertheless, unfettered markets will not always produce satisfactory outcomes. For example, markets do not always effectively deal with environmental impacts on the general community. Markets do not even exist in some such cases and government may need to intervene in some way (appendix 3).

However, government intervention does not always get it right either. Some environmental problems arise, not because markets do not work, but because markets are not allowed to work. This is true of water and other resources like forests where government ownership and control have often deliberately limited the role that competitive markets and prices play. For example, underpricing of irrigation water has not only misallocated a scarce resource but has also contributed to salinity problems.

When government intervention is judged to be appropriate, price mechanisms might still be an efficient means for satisfying certain environmental objectives. Trading in water rights and emission permits and price-based controls can contribute to flexible and low cost approaches to achieving environmental goals. With or without such mechanisms, government intervention should occur within a clear and stable framework and use measures that are transparent in the sense that their costs and benefits can be assessed.

Greater competition is not inconsistent with a community that cares. Competition can provide the means to achieve social objectives more efficiently. For example, private firms in a competitive environment have been shown to produce artificial limbs at lower costs and with shorter waiting periods than those produced by the government-owned Repatriation Artificial Limb and Appliance Centres (IC 1990d). More generally, competition increases national income which adds to the capacity to assist those in need.

A recent comprehensive report (Porter 1990) is the latest in a line of studies going back to Adam Smith that have stressed the importance of competition in the development of nations. In the economies studied, Porter stresses the importance of competition between domestic rivals in explaining the ability of successful countries to compete on world markets.

Greater exposure to competition — both at home and from abroad — is the surest means of securing higher productivity.

Foreign competition

In economies such as Australia's where the size of the domestic market in many goods is relatively small, exposure to foreign competition is particularly important. In industries such as steel, where large scale production is crucial to keep unit costs down, the domestic market may only be sufficient to support one or two producers. If there is to be vigorous and beneficial rivalry for sales, foreign competitors have a vital part to play. In larger nations such as Japan or the USA, foreign competition is not always as crucial, as their home markets are of sufficient size to support several viable producers without denying them the benefits of scale economies.

The phased reductions in assistance initiated in May 1988 are a decisive step in opening up Australian manufacturing industries to foreign market disciplines. The Commission has estimated that the average effective rate of assistance to the manufacturing sector will decline from 19 per cent in 1987–88 before the current program commenced to 12 per cent when it concludes. Estimates for 1989–90 show that to date the program has resulted in a reduction in effective assistance to 16 per cent (appendix 11). Assistance to agriculture has also continued to decline. The effective rate of assistance to agriculture fell by two percentage points to 9 per cent in 1988–89 (appendix 9). In recognition of the further gains to be tapped, the Government has signalled its intention to reduce tariffs again after 1992 (Governor-General 1990).

Public enterprises

Increased competition is essential to improve the performance of public enterprises. Australia's productivity performance in some public utilities falls well behind the OECD average. This matters all the more given that government business enterprises (GBEs) account for 10 per cent of the nation's gross product and employment.

There are various ways of promoting efficiency. Government ownership of enterprises needs to be reassessed and legislative barriers to competition between private and public enterprises removed. Contracting out government services to the private sector and common carrier provisions for access to networks such as those of the telephone system also offer scope for efficiency gains. GBEs with monopoly power can be broken into regional components whose performances can be compared and steps taken to have best practice introduced across the industry.

Experience has shown, however, that the mere removal of legal and regulatory obstacles to new competition is not always sufficient to guarantee real competition. For example, efficiency in the electricity sector could be improved by opening up electricity generation to greater competition through private sector participation. But for this to be effective, there must be access to transmission grids at reasonable prices.

Exposing public enterprises to competition is sometimes dismissed because it is assumed to involve wasteful duplication of infrastructure. For example, it would be wasteful to duplicate electricity distribution grids or telephone networks if all suppliers could be accommodated at least cost on a single distribution system. But this cannot be used as an argument to dismiss competition. Duplication in such cases is only likely to occur if firms cannot get access to the distribution networks at reasonable cost.

Mounting calls for increased government investment in infrastructure have to be assessed in the context of these competitive means of improving public enterprise performance. The first step is to assess how well we use existing infrastructure resources, before considering additional funding. For example, in the Hunter Valley, more realistic water pricing policies have been shown to reduce the need to construct new dams.

The Commission is continuing its examination of the ways that public enterprise performance can be improved in its inquiries into rail transport and energy generation and distribution.

Involvement of the States

The Commission's inquiry program has increasingly focused on the role of the States and Territories in the reform process. In many areas, better performance depends crucially on cooperation between governments.

The inquiry programs of the IAC and ISC and now of the Industry Commission have revealed a number of examples of how variations in standards between States add to costs. Under current building regulations, a crane working in Western Australia has to be retested before it can be used in New South Wales and retested again if it is moved across the border to Victoria. Similar differences apply to the regulation of lifts and scaffolding and to registration requirements for some types of construction labour. In some cases, such problems could be overcome if States agreed to recognise the standards set by each other. For example, rather than each State requiring manufacturers to meet its own set of regulations, any product packed and labelled in compliance with its home State's regulations could be accepted for sale throughout the nation. Proposals for mutual recognition are discussed in appendix 6.

While much remains to be done, State Governments have been very active in some areas of microeconomic reform (appendix 5). For example, the New South Wales Government has initiated a major program of reform involving corporatisation, the sale of enterprises, joint ventures with the private sector and greater contracting out of government services, as well as administrative reforms. All States have taken some action to improve the operations of their ports and to increase the commercial orientation of their business enterprises. In current inquiries which cover major areas of State responsibility — for example, rail, energy and statutory marketing arrangements — the Commission is receiving unprecedented cooperation from State and Territory Governments.

The approach of State and Territory Governments to reform is influenced by the structure of Commonwealth–State financial relationships. The States do not have access to a broad taxation base and there is an imbalance between the spending and revenue raising responsibilities of the Commonwealth and States. The impact of these financial arrangements on the efficiency of State and national economies has been largely overlooked until recently. The Prime Minister has taken a major initiative to develop better cooperation between the three levels of government and has put reform of financial relationships on the agenda. State Premiers are responding positively.

Labour market

More flexible labour markets are necessary if we are to build a more responsive and productive economy. This will require changes in such areas as the spread of working hours, multiskilling, upgrading skills and finding ways of allowing wage differentials to widen to attract resources where they are most wanted without causing flow-ons to other areas.

Flexibility at the enterprise level is essential. Indeed, there is widespread agreement that the key to labour market reform lies more in finding solutions at the enterprise level than at the national level. Increased competition in both product and service markets will help sharpen the attitudes of owners, managers and employees towards pursuing workplace reforms that yield productivity benefits. As enterprises come under greater competitive challenge, managers and employees will need to review their industrial relations practices.

It is also important to ensure that labour market arrangements do not reduce flexibility. Union amalgamations may contribute, at one level, to a more flexible and adaptive work force by increasing the range of tasks that employees can perform and reducing demarcation disputes. But amalgamations could also lead to greater centralisation of negotiations and standardisation of settlements — a direction that would tend to thwart enterprise flexibility.

The international dimension

Government can also play an important role in bilateral and multilateral forums to help ensure greater openness and competition in world markets. A recent study has estimated that Australia and New Zealand together stand to gain some $US14 billion annually from a 50 per cent reduction in trade barriers world wide (Stoeckel et al 1990). The most important current opportunity for reaping such gains is the Uruguay Round of trade negotiations, which is to conclude in December.

Australia's efforts to open foreign markets appear to have been impeded during the negotiations by a lack of appreciation within the countries concerned of the costs of support policies to their own economies and of the benefits from reform. The lack of understanding of the domestic benefits from each country's own liberalisation has actually been compounded by the GATT negotiating process with its emphasis on 'reciprocity' and the use of national barriers as 'negotiating coin'. In this sort of negotiation, small countries like Australia have little bargaining power. But they can influence international developments in two other ways — through 'demonstration effects' and the power of ideas.

The May 1988 announcement of tariff reductions by Australia was an important example of the demonstration effect. Those reductions were made, not as a *quid pro quo* for foreign liberalisation, but for the domestic benefits they would bring. In that action Australia has shown that it practises what it preaches. Since then, however, Australia's credibility may have been undermined by its provision of other forms of industry assistance, including bounty assistance to Kodak (with confidential performance criteria attached) and intervention to increase local participation in the construction platform on the North West Shelf gas project (appendixes 7 and 8).

A valuable idea which Australia has helped bring into the Uruguay Round is the need for increased transparency of trade and industry policies. Information about the existence and effects of such policies is clearly a precondition for reform. The Trade Policy Review Mechanism is now operating to improve information within the GATT about national policies (IAC 1989a). A related proposal, which Australia has supported, is to promote domestic transparency of protection policies through institutional arrangements at the *national* level. Regardless of the outcome of other negotiating areas in the Uruguay Round, this has the potential to be of lasting benefit and should be vigorously pursued. Ultimately, as Australia has found, it is only through widespread national awareness of the need for reform that durable reform becomes possible.

Priorities for action

Reform needs to proceed on as broad a front as possible, embracing both product and labour markets and involving all levels of government. The benefits of tackling impediments to efficiency on a broad front are widely recognised. Not only does improved economic performance require a greater effort and contribution from all sectors of the economy, but it is also easier to gain acceptance for change when all are involved.

Impediments to efficiency in one area of the economy adversely affect other industries and sectors. For example, inefficiencies on the waterfront harm exports of minerals, agricultural produce and manufactures and raise the costs of importing capital equipment, business inputs and consumer goods. Assistance and regulatory arrangements must be assessed in terms of their impact on the performance of all industries and not just on those immediately affected.

But it is not practical to expect to make progress simultaneously in all areas needing reform. It is sensible to concentrate efforts where potential pay-offs are largest. Transport, communications and other elements of infrastructure such as energy generation and distribution are still priority areas for structural reform. There are also regulatory issues, particularly relating to the environment, which need rapid resolution.

Apart from giving priority to further reductions in protection of the manufacturing sector, other existing assistance measures need scrutinising. The IAC has previously focused on such measures as offsets, partnership for development agreements and export market development schemes. Other areas warranting attention include local procurement for defence and for major resource developments such as the North-West Shelf gas project, as well as assistance to Australian goods and services through foreign aid programs. Recent developments in these areas are discussed in appendix 8. It is difficult for the community to assess whether these measures promote a more efficient and competitive industry structure when the costs and benefits of the measures are not readily identifiable. Yet some of these measures are being promoted more widely as a means of improving the performance of Australian manufacturing.

Chapter 4
Selective assistance is not the answer

Some challenge the view that freeing up the economy and increasing competition is the key to better economic performance. Manufacturing industry in particular has been cited as requiring special government assistance of one kind or another. While removing industry protection and other impediments is seen as important, it is argued there is a role for government to complement market forces. To substantiate the argument, reference is made frequently to the experience of East Asian economies where strategic government interventions are said to have been important in explaining strong economic growth.

Additional assistance measures

Renewed support for the argument that government intervention is necessary to complement market forces has been given in a recent report sponsored by the Australian Manufacturing Council (AMC 1990). The report endorses the progressive phasing down of industry protection and the removal of impediments to industrial development. But it also argues for a package of additional measures to assist the manufacturing sector. It proposes that a link be established between reductions in protection and the use of other measures. The additional measures are seen as necessary to address critical weaknesses of Australian manufacturing industry and to promote the development of firms exporting high value-added manufactured goods.

The Commission welcomes the attention that the report gives to general ways to improve the competitive position of the economy. Where we part company is with the report's advocacy for additional measures to assist selected manufacturing industries. The report fails to recognise the significance of the costs these measures would impose on other industries, activities and taxpayers. There is also the danger that, despite the lessons of the past, a signal would be given to industry once more to focus on government assistance as a solution to Australia's economic problems.

One of the justifications which the AMC offers for recommending selective assistance for the automotive, telecommunication equipment, computer, aerospace and pharmaceutical industries is Australia's large trade deficits in these products. The inference is that the way to solve our current account problem is to concentrate on developing those industries which contribute most to the deficit. This amounts to a policy of concentrating on our weaknesses rather than our strengths. The real message of the large deficits is that these activities are ones in which Australia is not competitive. While it might be possible for firms to build competitiveness in these areas over time, it is a high risk strategy for governments to provide special assistance to areas of greatest disadvantage.

Insufficient attention has been paid in the report to the costs of its recommendations. One example is provided by the recommendation of accelerated depreciation for taxation purposes for export oriented, value-added resource processing projects with a minimum investment of $20 million. This seeks to compensate investors on a selective basis for higher inflation and the higher real cost of investment capital they are claimed to face relative to our competitors. The proposal would disadvantage a wide range of industries which would be ineligible for favoured tax treatment. These include all non-exporting industries (including those in manufacturing), and small to medium sized export oriented firms (with investment proposals of less than $20 million). It would also disadvantage export projects with low value added, be they large or small. There would be costs to government revenue which would have to be made up in other ways such as by increased taxation or reduced expenditure. Increased taxation may itself be a disincentive to investment.

Proposals to link reductions in protection to other microeconomic reforms and the provision of additional assistance measures are likely to lead astray, rather than enhance, efforts to improve our economic performance. While we agree that reform should be implemented on a broad front and should be accelerated in areas where it will provide large gains to the community, making reform conditional on such a link may well see the whole process slowed down. Although progress is being made, similar rates of progress are not achievable on all fronts. But this should not lead us to abandon or delay setting reform agendas for particular areas while awaiting developments in others. Governments should avoid supporting conditional reform options and the policy paralysis inherent in them.

The Commission has reviewed the development experience of Hong Kong, Japan, Korea, Singapore and Taiwan in an attempt to understand better the role of government intervention in their exceptional economic success (appendix 4).

The extent of broad government intervention has varied between the economies studied. In some countries, particular sectors such as agriculture and manufacturing have been protected from international competition. The financial systems in Japan and Korea were highly regulated with tax and credit policies providing selective allocation of financial resources to industry. In contrast, the financial system in Taiwan has operated with more freedom from government intervention.

Notwithstanding substantial government intervention in most of these economies, their success lies in a complex mix of factors. Although the historical, economic, political and social experience differed in each, some common factors contributed to their outstanding growth:

- Each economy faced a period of crisis and widespread change before its rapid growth. In one way or another, crisis contributed to the emergence of a strong social consensus in favour of growth and provided a flexible and responsive economic environment.

- Strong governments were able to resist special interest groups and focus instead on meeting national growth priorities, for example, by giving preference to spending on those highways, ports and harbours which helped industry development.

- There was considerable scope to catch up with advanced nations by importing and adapting their technology and production methods. There is scope to grow quickly when starting from a low base.

- Once rapid growth began, it was sustained by vigorous competition either domestically (in the case of Japan) or internationally (in the other cases) and through high saving and investment rates.

- The competitive environment was underpinned by a plentiful, flexible and competitive labour supply.

The success of these Asian economies cannot be explained in terms of government targeting of key sectors. Such targeting was not present at all in the success of Hong Kong. Where targeting was present, there were successes but there were also notable failures. In Japan, for instance, MITI recorded several failures in its attempt to guide industry, including its idea of a single model people's car produced by one officially designated company. In Japan and Korea, targeted and non-targeted industries both recorded outstanding output growth. In Korea, several of the industries which were designated to be strategic during the heavy industrialisation drive in the 1970s were already growth leaders in the 1960s (for example, transport equipment and steel). While growth in these industries was boosted following government support — rates over 30 per cent a year were not uncommon — similarly high growth was achieved by other industries such as footwear, metal products and electrical and scientific equipment.

There is substantial agreement that industrial targeting in Australia has detracted from our economic performance. Australia's experience with industrial targeting has been uniformly poor. Several of the risky, high technology ventures supported by entrepreneurial State Governments have proved to be costly failures. Other well known examples are the textile, clothing, footwear and motor vehicle industries.

While Australia cannot and should not mimic the experience of successful Asian countries, some of the factors contributing to their success can be adapted to our requirements. We could benefit from:

- better understanding in the community of the benefits of higher productivity growth;
- vigorous competition in product markets through exposure to international markets and domestic rivalry; and
- more flexible labour markets.

Chapter 5
Operations of the Commission

The operations of the Commission are governed by the *Industry Commission Act 1989* which specifies the following functions:

- holding public inquiries and reporting on industry matters the Government refers to it;
- reporting annually on the economic performance of industry and the effects of assistance and regulation on industry and the economy; and
- undertaking related functions, such as advising on business regulation and publishing information papers to enhance community understanding of industry policy issues.

In fulfilling these functions, the Commission must have regard to the Government's industry policy objectives set out in section 8 of the Industry Commission Act. These objectives are:

- to encourage the development and growth of Australian industries that are efficient in their use of resources, self-reliant, enterprising, innovative and internationally competitive;
- to facilitate adjustment to structural changes in the economy and to ease social and economic hardships arising from those changes;
- to reduce regulation of industry (including regulation by the States and Territories) where this is consistent with the social and economic goals of the Commonwealth Government; and
- to recognise the interests of industries, consumers, and the community, likely to be affected by measures proposed by the Commission.

The Commission must also take account of the environmental and social consequences of the recommendations it makes.

The Commission (or the IAC) received 12 references and completed 9 reports in 1989–90 and at 30 June 1990 had 10 references on hand. Since then it has reported on product liability proposals and aids and appliances for people with disabilities. Information on the inquiry program and government decisions on reports, including those on recent reports of the Inter-State Commission, is provided in appendix 16.

Over the next 12 months the Commission will be completing inquiries on major sectors of Australian industry — mining and minerals processing, energy generation and distribution, rail transport, construction, and the automotive industry. Reviews of concessional entry systems for imports, recycling and statutory marketing arrangements for primary products will also be completed. The Government has foreshadowed references on: exports of education services; exports of health services; the availability of capital; dairying; raw material pricing for domestic use; export franchising and distribution arrangements; sugar; the implications for Australia of firms moving offshore; tobacco; cost recovery for fisheries management; the national industry extension service; and the national procurement and development program.

This spectrum of inquiries demonstrates the much wider role for the Industry Commission than its predecessors in the microeconomic reform effort. Some of the broad issues currently being addressed in Commission inquiries include:

- the scope for more productive work and management practices in industry;
- securing improved efficiency within Commonwealth and State Government business enterprises;
- public/private participation and ownership in supplying infrastructure services;
- the efficient provision of community service obligations;
- the appropriate framework for land use decisions,
- economically efficient ways of achieving environmental objectives and sustainable development;
- intergovernmental cooperation; and
- regulatory impediments to improved industry performance.

When announcing the formation of the Commission, the Treasurer also set out a two-year inquiry program for it and later provided an indicative timetable (Keating 1989a, 1989b). The forward inquiry program provides the means to coordinate better the activities of the various government agencies advising on industry matters, to focus the Commission's resources and expertise in areas consistent with the Government's priorities for structural reform, and to provide an orderly framework for planning by both the Commission and participants in its inquiries.

Any forward inquiry program needs some scope to accommodate emerging demands and changing priorities. During 1989–90 the Commission responded to requests to prepare an interim report on paper recycling, to report on the production of papers from unbleached and non-chlorine bleached pulps, and to advance the timing of the inquiries on concessional entry systems for imports and on the automotive industry.

Public inquiry and reporting are essential to the Commission's role. The inquiry process is diminished if reporting periods are compressed and the draft report process forgone. While the pressures for timely reporting are recognised, there is limited scope to reduce the period for consultation, public hearings and issuing draft reports.

In the main, the Commission's reports have been released promptly. This practice now has a basis in the Industry Commission Act which requires reports to be tabled in Parliament within 25 sitting days unless the Commission recommends otherwise.

There have been extended delays in announcing decisions on some reports. For example, the Commission had 30 days in which to report urgently on concessional entry of aluminised steel for use in mufflers and exhaust systems, but 11 months passed before a decision was announced and the Commission's report released.

When the Government's decisions on the reports on petroleum products taxation (Keating et al 1989) and the packaging and labelling of processed foods and beverages (Button and Bolkus 1989) were announced in 1988–89 they were accompanied by detailed responses to the IAC's reports. The practice was not continued last year in relation to the reports on soda ash and aluminised steel (Jones 1989, Button 1990g). Explaining to the community the Government's reasons for rejecting or putting aside Commission recommendations adds to the transparency of the public inquiry process.

As part of its general reporting function — which encompasses its annual report, information papers and other general publications — the Commission provides information and analysis on the economic performance of industry and the opportunities for improved economic performance across wide sectors of the economy. Information on research and inquiry-related publications released in 1989–90 is provided in appendix 17.

Research capabilities need further development if the Commission is to upgrade its monitoring of the performance of Australian industry and to identify priority areas for structural reform. The Commission is currently exploring analytical frameworks and information systems that will enhance these activities.

One stream of research involves measuring the economic performance of Australian industry, focusing particularly on factor productivity and the performance of government business enterprises. An information paper on productivity growth and rates of return in major Commonwealth GBEs and the Australian water industry was released in August (IC 1990e). A second stream of new research will enhance the Commission's modelling capabilities so that resource use and environmental policy issues can be analysed in an economy-wide context. For example, expanding the ORANI model of the economy to take account of pollution emissions from industry will provide a better understanding of the wider impacts of policy changes affecting energy generation and transport systems.

Assistance measurement and evaluation

Analysing trends in industry policy development and detailing the levels and changes in assistance provided to different industries are important elements of the Commission's general reporting function.

The Commission continues the assistance measurement work of the IAC. The most recent estimates of assistance for agriculture and manufacturing are in appendixes 9 and 11. Preliminary estimates for mining industries are presented for the first time. In terms of border interventions, the mining sector receives virtually no assistance but is taxed by the assistance provided to other sectors (appendix 10).

Estimates of assistance are supplemented by information on developments in sectoral arrangements, alternative assistance measures, the consumer tax effects of assistance, budgetary assistance, and anti-dumping activity (appendixes 7, 8, 12, 13 and 14 respectively). A number of recent industry policy reviews and decisions relating to industry are detailed in appendix 15. Not all these bring an economy-wide perspective and public inquiry processes to bear.

The ORANI model

An important element of the Commission's analytical capacity is the ORANI model of the Australian economy. This model is used to project the effects of proposed changes to government assistance to and regulation of industry. It is being used in all the Commission's current inquiries. As well as its own enhancement of the ORANI framework, the Commission continued to support the further development of ORANI by the IMPACT Project Research Centre at the University of Melbourne.

Work for other agencies

In the past year the Commission provided analysis on trade and industry assistance matters to various Commonwealth agencies including the Department of Foreign Affairs and Trade, the Bureau of Industry Economics, the Department of Industry, Technology and Commerce and the Treasury. The Commission also assisted New South Wales Government bodies in their reviews of food regulation and marketing boards.

Along with other agencies and departments, the Commission assisted in the preparation of the Australian report for the Trade Policy Review Mechanism which has been introduced in the General Agreement on Tariffs and Trade (GATT). This mechanism will review the trade policies of member countries on a regular basis. Australia was one of the first countries to be reviewed and its country report was intended to provide a model for other country reports.

The Commission has also supplied analysis and information to the Department of Foreign Affairs and Trade to assist in bilateral discussions as part of the Uruguay Round of multilateral trade negotiations under the GATT. In particular, the Commission has analysed changes to the Australian Tariff applying from the beginning of the Uruguay Round till the mid-1990s when Australia's current program of protection reforms is scheduled to be completed. The Commission is also assisting in the compilation of Australia's country list of agricultural support measures. These country lists are the result of a draft agreement on agriculture and may provide the basis for reductions in support for agriculture in participating countries.

By the end of 1990 the Commission will have completed a multi-country trade model funded by the Department of Foreign Affairs and Trade. The model will be used to analyse the economic effects of changing trade arrangements in the Asia–Pacific region.

The Commission continued to support the use of the ORANI model in other government agencies and in the private sector. ORANI analyses were undertaken for the New South Wales Government inquiry into statutory marketing authorities, for the Business Council of Australia study of structural adjustment policies to address external balance problems, to evaluate land transport reforms for the Department of Transport and Communications and to examine the regional effects of industry assistance for the Economic Planning Advisory Council.

Office of Regulation Review

The functions and staff of the Business Regulation Review Unit (BRRU) have been incorporated within the Office of the Industry Commission and the Unit renamed the Office of Regulation Review (ORR). The ORR is responsible for:

- examining and advising the Government on proposed changes to regulation;
- preparing public information papers and submissions on overall developments in regulation and on particular aspects of regulation; and
- the business regulation request and response procedure.

The Commonwealth Government's policy is that regulatory intervention in the economy will be supported only when it is justifiable on grounds of efficiency and/or equity. To meet this test, a well defined social and/or economic problem must exist, other solutions must have been already considered (for example, private or non-regulatory methods), and the expected benefits of regulation must outweigh its costs. Efficiency in this respect refers to the overall impact on the community not simply the costs of government administration.

Procedures have been established to ensure that information on the expected costs and benefits of regulatory proposals is made available to the Cabinet. The Minister for Science and Technology and Minister Assisting the Treasurer has responsibility for matters relating to the ORR.

During 1989–90 the ORR provided advice to the Structural Adjustment Committee of Cabinet on a large number of regulatory matters. It assisted regulatory agencies in the detailed design of new major bodies of regulation such as the national arrangements for the control of drugs. The ORR also cooperated with State deregulation units in examining State regulation and commissioned a study of the regulatory environment of primary industry statutory marketing authorities in New South Wales. It provided information on Commonwealth regulation for use in

State one-stop licensing shops and it assisted the newly elected Queensland and Australian Capital Territory Governments establish regulation review functions.

In October 1988 the Government introduced a request and response procedure for regulation review to be coordinated by the BRRU. It was designed to provide business with a means to initiate examination of any business regulation under the responsibility of the Commonwealth. However, the procedure has enjoyed only limited success as the number of actionable requests has been very low.

The ORR made public submissions to two of the Australian Broadcasting Tribunal's inquiries: regulation of television program content and advertising (details are in appendix 17).

Information on appointments to the Commission, its staffing and structure, financial statements, the draft corporate plan, the freedom of information statement and other administrative matters are reported in appendix 18.

The Commission records its appreciation of the staff for their work during the year.

A S Cole	*Chairman*
D L McBride	*Commissioner*
R G Mauldon	*Commissioner*
M L Parker	*Commissioner*
K J Horton-Stephens	*Commissioner*
T J Hundloe	*Commissioner*
A C Harris	*Commissioner*

Canberra, Australian Capital Territory

20 September 1990

Appendixes

Appendix 1
The gains from microeconomic reform

In its 1988–89 Annual Report the IAC quantified the economic gains from introducing a range of microeconomic reforms. This appendix provides updated estimates of these gains by extending the previous analysis to include estimates of gains from improved provision of water services and the cost savings achievable by government contracting out the provision of certain goods, services and capital works. In the light of new information on the scope for improved provision of rail services, updated estimates of the gains from rail reforms are also provided. The reforms investigated this year, together with those quantified in the IAC's 1988–89 Annual Report, are estimated to expand output over the longer term by $22 billion a year in 1988–89 dollars, eventually creating an additional 53 000 jobs.

Reforms quantified in this analysis include:

- cost savings in domestic water transport;
- cheaper international liner shipping;
- introduction of the recommendations of the Royal Commission into Grain Handling and Storage;
- improved provision of rail services;
- improved provision of domestic and international aviation;
- better pricing and provision of road infrastructure;
- improved provision of post and telecommunications;
- more efficient production and pricing of electricity;
- the removal of rural and manufacturing assistance;
- improved provision of water and sewerage services; and
- contracting out by governments of certain services and capital works.

The reforms quantified in the 1988–89 analysis were estimated to generate $16 billion in annual output gains. These gains arose from reforming: transport, $10.7 billion; assistance, $3.7 billion; post and telecommunications, $1.7 billion; and electricity $1.4 billion. The revised rail simulations generate much bigger gains than obtained in the earlier analysis. Consequently, the overall gain from the above reforms in these areas is now estimated to be $17.7 billion.

The additional reforms quantified this year are also substantial. Contracting out would generate an extra $3.4 billion in annual output and improved provision of water services would provide an additional $1 billion of output each year.

Some of the gains from the microeconomic reforms examined in this appendix have already been realised. For example, productivity improvements are under way on Australia's waterfront and in Australia's shipping fleet. Certain State railways and energy utilities have significantly improved labour productivity. Governments and their business enterprises have begun contracting out.

Improved provision of water services

Water services — sewerage and drainage, fresh water and irrigation — are provided by State Government departments, statutory authorities and local governments. In a recent study undertaken for the Commission it was estimated that in 1987–88, these bodies employed a capital stock with a value of $50 billion — some 7 per cent of Australia's total capital stock (IC 1990e, chap 5). In 1987–88 these assets earned the Australian community about $750 million which represents a real return of 1.5 per cent. This compares with the Commission's recently indicated benchmark real return of 8 per cent, calculated as the real long-term bond rate plus a small margin for risk (1990e, p. 1).

The analysis indicated great potential to reduce capital costs in the provision of water services. It was estimated that the cost of delivering water services could be cut by 15 per cent in the longer term by better managing assets to ensure that they were not replaced prematurely and by placing a greater emphasis on competitive tendering for asset replacement. The Commission's consultants estimated that such a reduction in capital costs in 1987–88 would have reduced the cost of water delivery services by $650 million. The benefits these improvements would generate were simulated as productivity improvements in the use of all inputs such that the cost before subsidies of providing water services fell initially by 15 per cent.

Improved provision of rail services

In its report on government non-tax charges, the IAC identified major inefficiencies in Australia's rail networks. The Commission's analysis drew heavily on the STAP report which looked at the efficiency of Victorian railways (STA 1988) and on the Booz–Allen & Hamilton analysis of New South Wales railways (SRA 1989a,b). Labour savings of at least 50 per cent were indicated.

More recently, as part of the Government's further attempts to improve Australia's land transport networks, a National Freight Initiative (NFI) committee was formed to investigate the scope for, and benefits to be derived from, a single authority responsible for all interstate rail freight. The NFI committee commissioned consultants (Travers Morgan Pty Ltd and Booz–Allen & Hamilton Australia Ltd) to report on the financial and economic benefits likely to occur with each of six business strategy scenarios, and on any preconditions required to achieve these benefits.

Table A1.1
Cost reductions possible from Australian railways adopting international standard work practices
(per cent reduction on 1988–89 unit costs)

Labour	*Capital*	*Materials etc*	*Total*
35.4	11.0	34.1	30.6

Source: Derived from data provided by Travers Morgan.

The consultants concluded that a single authority responsible for all interstate rail freight could be profitable so long as substantial productivity improvements were implemented. They estimated, for example, that costs of interstate rail could be cut by 35 per cent if world standard efficient work practices and costs were introduced into interstate rail networks.

The consultants also provided preliminary estimates of cost reductions possible if all rail networks were to move to world standard efficient work practices and costs in all areas of operation. Savings of about 30 per cent are indicated, mostly derived from improvements in labour and materials productivity (table A1.1). Less scope exists for capital productivity improvements.

This overall productivity improvement was simulated to calculate the benefits to be had from Australian railways moving to international best practice in all fields of operation.

Contracting by governments for the provision of certain services and inputs

Recent empirical studies suggest that considerable cost savings could be obtained in many public sector activities by putting them out to competitive tender. Activities suitable for tender include cleaning, maintenance and catering, and many other more specialised services. Domberger (1989) estimates conservatively that such activities account for over 10 per cent of public sector spending. Evidence from Australia and overseas suggests that, across the range of these activities, cost savings of the order of 20 per cent are obtainable.

Using Domberger's estimates of the cost savings available from competitive tendering for the supply of certain services it was calculated that general government (such as public administration, defence, and education) could have saved $821 million in operating costs in 1988–89 through competitive tendering. Savings in government business enterprises (GBEs) were calculated at $936 million in 1988–89 dollars. These savings convert to labour and capital productivity improvements of 2.4 per cent and 5.2 per cent for general government activities and GBEs respectively. These estimates exclude gains from competitive tendering in transport, electricity, communications and the water industries. The gains from competitive tendering in these areas are implicit in the simulated productivity improvements for these activities reported elsewhere in this appendix.

Domberger also provided estimates of savings from contracting out government capital works. His estimates imply that $164 million worth of general government capital works spending also could have been saved in 1988–89 through contracting out construction work. These estimates imply a 1.5 per cent improvement in capital productivity in the general government area. No estimates were given of savings possible in the capital works programs of GBEs.

Many of the gains estimated by Domberger would already have been achieved as competitive tendering for current expenditure is extensive. For example, 60 per cent of refuse collection services are being tendered, 30 per cent of the operation of community facilities, 50 per cent of student transport, and 50 per cent of school cleaning. Current expenditure on competitive tendering for all governments is estimated to exceed $3.7 billion in 1988–89 dollars, with annual savings of $936 million being made. Against this, there is probably greater scope for competitive tendering than indicated by Domberger.

These savings from competitive tendering would be achieved largely through improvements in productive efficiency induced by competition to provide services and capital works. By reducing the call of these activities on the community's resources, they would expand its productive capacity. The savings identified by Domberger were therefore simulated as productivity improvements.

The projected long-term impact of the microeconomic reforms analysed in the IAC's 1988–89 Annual Report and those evaluated this year are shown in table A1.2.[1] The results suggest longer term annual gains in real GDP of 6.5 per cent, equivalent to just over $22 billion 1988–89 dollars. Of this about $14 billion accrues in terms of higher consumption expenditure. This is equivalent to about $2300 a household. The reforms are estimated to generate an extra 53 000 jobs.

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1 The critical assumptions underpinning the long-term nature of the projections are as follows: sufficient flexibility in industry capital stocks is assumed so that after-tax rates of return are restored in the long run (a period of about 10 years) to the values they would have had in the absence of the microeconomic reforms, except in the case where long-run increases in rates of return have also been imposed; real wages and occupational wage relativities are sufficiently flexible to keep occupational employment rates constant; and the public sector borrowing requirement is kept fixed in real terms via equiproportional adjustments to personal and corporate income tax rates. Because some of the results for individual microeconomic reforms were first reported in different contexts, there are minor variations in some of the other, less critical model assumptions. Thus, in some scenarios government consumption spending is held constant in real terms, while in others it is adjusted in line with household consumption spending. However, variations in assumptions such as the way consumption gains are divided between households and government have relatively minor effects on the overall long-term results.

The benefits from microeconomic reform are influenced by governments' assumed response to the increased tax base a growing economy provides. In this analysis, it is assumed that governments will maintain the real public sector borrowing requirement and to achieve this will adjust tax rates. Alternatively, it would be possible to maintain tax rates thereby increasing national saving. As the cost of capital to Australia is assumed given in the ORANI model, increased national saving would not be seen to provide additional benefits over and above those identified in this appendix.

Macroeconomic effects

As outlined in the IAC's 1988–89 Annual Report, the microeconomic reforms simulated benefit the economy in one of three ways. First, microeconomic reforms such as improved operations of railways expand Australia's effective resource base. This allows output, employment and wages to rise while maintaining the competitiveness of the economy as indicated by increased exports.

Second, some reforms benefit Australia through access to cheaper inputs. Reductions in manufacturing and rural assistance are a prime example. Such reforms obviously benefit the domestic industries (particularly those in the traded sector) that use cheaper importable goods and services, but may harm those that directly face stronger competition. Overall, however, these reforms are projected to produce income, consumption and real wage gains.

Finally, other reforms involve changes in domestic pricing policies. The pricing component of the electricity simulations fit into this category. The microeconomic effects in these simulations derive from the effects of the pricing changes on resource allocation rather than from improved productive efficiency. The effects per dollar of microeconomic reform are thus much smaller than those observed in simulations involving improved production efficiency. Overall, in most cases, the pricing simulations involve increased income, consumption and wage gains.

Sectoral impact

When gains accrue primarily through productivity improvements, they tend to be spread fairly evenly throughout the economy. This can be seen in the sectoral projections for railway reforms. Productivity improvements also comprised a large proportion of the reforms investigated in the IAC's 1988–89 Annual Report. Thus all sectors were seen to benefit from the reforms simulated last year.

At a disaggregated level, exceptions can arise. A few industries fail to receive sufficient spillover benefits from cheaper material inputs to offset the effects of higher wages allowed by the productivity improvements. Productivity improvements can also allow industries to economise on capital, adversely affecting their capital suppliers.

Overall, the sectoral results tend to be positive for reforms which lead to productivity gains, but mixed for reforms which increase foreign competition or involve domestic pricing policies. Where sectoral results are mixed, it is still possible for gains from one type of reform to offset losses from others.

The mining sector is projected to receive by far the greatest benefit from the reforms in this appendix. Few reforms impose direct costs on the sector, while it is generally well placed to take advantage of cheaper input costs since it is less constrained than agriculture by available supplies of resources such as arable land. While the estimated long-term benefit to mining might seem large, it should be noted that during 1989–90 alone, the gross product of the mining sector increased by 19 per cent.

The other broad sectors also gain overall. At a disaggregated level, the only industries to suffer significant long-term declines are those particularly susceptible to foreign competition — the textile, clothing and footwear, motor vehicle and miscellaneous manufacturing industries — which are adversely affected by the reduction in manufacturing assistance.

Table A1.2
Estimated long-run effects of certain microeconomic reforms[a]

Description	*Reform of:* Transport excluding rail	Post and telecom-munications	Electricity supply	Rural and manu-facturing assistance	Improved provision of water services	Rail trans-port	Con-tracting out	*Total*
Macroeconomic variables								
Real GDP	2.0	0.5	0.4	1.1	0.3	1.2	1.0	6.5
Real consumption	2.4	0.5	0.4	0.4	0.3	0.6	0.8	5.4
Real investment	2.0	0.4	0.1	2.4	0.1	1.5	0.7	7.2
Real government spending	1.5	..	0.4	..	0.3	0.6	0.8	3.6
Export volume	2.5	0.7	0.4	8.6	0.3	3.4	1.7	17.6
Import volume	3.3	0.3	0.2	6.2	0.1	1.0	0.5	11.6
Balance of trade	..	..	..	..	..	0.3	0.2	0.5
CPI	- 2.4	- 0.3	..	- 3.8	- 0.2	0.3	- 0.8	- 7.2
Real pre-tax wage rate	4.5	0.6	0.5	1.6	0.4	0.8	0.8	9.2
Aggregate employment (persons)	0.4	..	..	0.1	..	..	0.1	0.6
Aggregate capital stock	2.0	0.4	0.1	2.4	0.1	1.5	0.7	7.2
General shift in tax rates	1.4	- 1.2	- 1.3	2.4	- 1.0	- 2.5	- 2.0	- 4.2
Sectoral outputs								
Agriculture	0.4	0.1	- 0.1	1.3	0.1	0.4	0.6	2.8
Mining	9.5	1.2	1.0	11.5	0.5	6.5	2.4	32.6
Manufacturing	1.5	0.5	0.2	- 1.0	0.1	0.5	0.9	2.7
Services	0.7	0.4	0.4	0.9	0.3	0.8	0.9	4.4

.. Less than 0.05 per cent.

a All results are expressed in percentage changes, except for the balance of trade which is expressed in percentage points worth of base-period GDP.

Appendix 2
Australia's economic performance

The real wealth of Australians can be increased in three ways: by increasing the inputs available to the economy, such as through discovering new resources or using more labour and capital; by the prices of our exports rising relative to those of our imports; and by using less materials, labour and capital per unit of output. Hence, ensuring that the Australian economy is performing as efficiently as possible is critical to the continuing improvement of our living standards. Only by making the most of the resources we have available and by matching the performance of our trading partners and competitors will we be able to retain or improve our position relative to other countries.

Productivity change is an important indicator of how well the economy is performing. Productivity growth measures changes in the amount of output that can be produced from a unit of input. It thus gives an indication of how efficiently we are transforming inputs into end-products and of the size of the economic cake available to increase community living standards.

Productivity indexes can be formed by taking the ratio of outputs produced to the quantity of inputs used. Ideally all inputs used in production should be accounted for to form a measure of total productivity. However, output is often measured relative to one input such as labour or capital. The disadvantage of these single or partial productivity measures is that the composition of inputs may be changing, thus giving a misleading impression of overall economic performance (for example, if capital is being substituted for labour then labour productivity may be increasing while capital productivity, and possibly total productivity, is declining). More generally, productivity will be increased by advances in technology, a better trained work force, removing restrictive work practices and eliminating other sources of waste and inefficiency.

While Australia's productivity growth is a useful measure of our economic performance, other aspects also need to be considered. For instance, our living standards will be influenced not only by what we can produce, but also by the prices we receive for our exports relative to the prices we have to pay for our imports. This ratio of export to import prices is known as the terms of trade. Improvements in the terms of trade mean that a given quantity of our exports has become more valuable in international markets and can be used to purchase a larger quantity of imports. Clearly such a terms of trade improvement has the potential to raise community living standards.

Furthermore, looking at productivity performance for Australia in isolation means little unless it is compared with our trading partners' productivity. Comparisons need to be made not only of growth rates of productivity but also of absolute levels — a country can take little comfort from a similar productivity growth rate to those of its partners if it still has a lot of catching up to do.

Recent evidence available on Australia's productivity growth performance is reviewed in this appendix along with the limited evidence available comparing our absolute productivity levels to other countries. The measurement of productivity is then extended to allow for changes in the terms of trade and the relative contributions of productivity and terms of trade changes to community living standards are examined.

Labour productivity

Most analyses of productivity change in Australia have concentrated on labour productivity, which measures the amount of output produced per unit of labour input. Growth rates of labour productivity for the economy as a whole have dropped off over the second half of the 1980s, although this trend was reversed in 1988–89 (table A2.1). Growth rates of output per person employed have generally been below those of output per hour worked due to the move to shorter working weeks and an increase in part-time employment, particularly since 1984. The growing importance of the services sector, which has lower measured labour productivity growth than the economy as a whole, and the falls in real wages which have taken place since 1983–84 (leading to substitution of labour for capital), help to explain the worsening performance of labour productivity over the 1980s.

Table A2.1
Australian labour productivity growth: 1974–75 to 1988–89
(percentage change)

	All industries		*Non-farm market sector*	
Period	*per person employed*	*per hour worked*	*per person employed*	*per hour worked*
1974–75 to 1988–89	1.4	1.7	1.8	2.1
1982–83 to 1988–89	1.6	1.5	2.2	2.1
1985–86 to 1988–89	0.8	0.7	1.4	1.5
1988–89	1.5	2.6	2.0	4.4

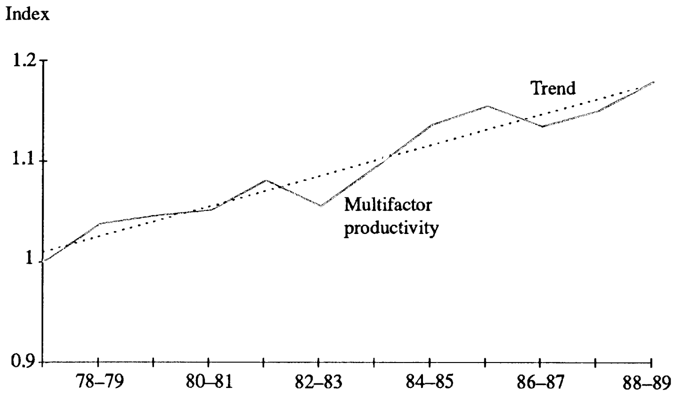
Source: BCA (1990).

Labour productivity growth has varied considerably between different sectors of the economy over the last fifteen years. The sectors with the highest growth rates since 1974–75 have been: Transport, storage and communication; Electricity, gas and water; and Manufacturing. Their growth rates have been 4.3 per cent, 4.2 per cent and 3.1 per cent, respectively (BCA 1990). Parts of the services sector (such as Recreation, personal and other services) performed worst over this period with negative measured growth rates, although this may in part reflect difficulties in observing the output of some services industries. Labour productivity growth rates for agriculture have fluctuated widely as output has varied with seasonal conditions. The severe drought of 1982–83 led to a marked downturn in labour productivity as output fell but subsequent rapid productivity growth as output recovered. Labour productivity growth performance since the mid-1980s has been strongest in those service sectors dominated by government enterprises. This most likely reflects the increasing pressure on government business enterprises to catch up to productivity and efficiency levels found in the private sector.

Multifactor productivity

Measures of labour productivity alone, however, may give a misleading impression of overall productivity performance as they fail to allow for changes in the composition of input use. To overcome this, the ABS has recently released estimates of multifactor productivity which allow for changes in both labour and capital usage (Aspden 1990). The multifactor productivity series and its trend for the latest 12 years are reproduced in figure A2.1.

Figure A2.1
ABS multifactor productivity: 1977–78 to 1988–89



The multifactor productivity index dipped below trend in 1982–83 and 1983–84 due to the combined effects of a general recession and severe drought conditions in agriculture. Both these events led to business reducing output but retaining most of their labour and capital inputs in anticipation of recovery to avoid incurring higher start-up costs. Consequently, total productivity grew strongly between 1983–84 and 1985–86 as output recovered but input use grew far more slowly. Again in 1986–87 total productivity fell below trend with the economic downturn and has only returned to trend levels in the latest year. Multifactor productivity increased at a trend rate of 1.4 per cent over this period.

These ABS multifactor productivity estimates represent a significant step forward in measurement. The ABS (Aspden 1990, p. 12) notes that its estimates show stronger growth in productivity than earlier studies by the OECD (Englander and Mittelstadt 1988) and EPAC (1989), due to different coverage of economic sectors and differences in methodology. However, the ABS also notes that the OECD series remains the only means of comparing productivity growth across countries on a consistent basis.

Australia's productivity growth rates have not been impressive compared with other countries, particularly in the decade since 1979 (OECD 1990b). Over the period 1973 to 1979 Australia's total factor productivity growth rate was 0.8 per cent a year compared with an OECD average rate of 0.6 per cent and an OECD Europe average of 1.4 per cent. In the decade since, Australia's growth rate dropped to 0.5 per cent compared with an OECD average of 0.9 per cent and an OECD Europe average of 1.2 per cent. In the period 1973 to 1979, Australia's labour productivity growth was well above the OECD average (2.2 per cent compared to 1.4 per cent) but in the most recent decade it dropped below the OECD average (1.1 per cent compared to 1.6 per cent).

Of more relevance than comparing productivity growth rates is a comparison of absolute productivity levels between countries. As the process of economic growth and development proceeds, countries which are far behind the world leaders tend to grow faster as they catch up to the productivity levels of the leaders. Thus high relative growth rates may simply indicate that a country still has a lot of catching up to do. Comparisons of productivity levels are rare. Haig (1986) found that Australia had very high labour productivity levels in agriculture and mining compared with the UK, the USA and West Germany. In manufacturing and services, Australia was less productive than West Germany and considerably less productive than the USA. Australian productivity levels in manufacturing, power, water and transport were less than half those of the USA. A recent OECD (1990a) study found that Australian productivity levels in public utilities (electricity, gas and water) were around half those of the average for other OECD countries.

As well as productivity improvements, a favourable shift in the pattern of our export prices relative to our import prices can improve our living standards. If export prices increase relative to import prices, we need devote fewer resources to exports to buy the same quantity of imports. And the freed up resources can be used to produce more goods for domestic consumption. In this sense a terms of trade improvement is similar to an increase in productivity — it enables domestic residents to get some extra output for no additional expenditure of effort. Hence, both productivity and terms of trade improvements increase the 'purchasing power' of domestic resources.

To gain an insight into the contribution of productivity and terms of trade changes to Australian living standards, the Commission has applied the producer theory approach of Diewert and Morrison (1986) to the ABS market sector data. In this approach, the market sector is assumed to produce two categories of outputs: all goods sold domestically and exports. All imports are assumed to pass through the market sector and are thus treated as inputs while also being included in the domestic sales output category. By utilising developments in index number theory, the contribution of changes in productivity and the terms of trade to domestic purchasing power are isolated.

A productivity index analogous to the ABS multifactor series is constructed to measure changes in the economy's production, technology and efficiency. The efficiency with which domestic labour and capital inputs are transformed into outputs will depend upon technological change over time and the effectiveness with which existing technology is used. In technical terms, the productivity index shows the changes in output resulting from changes in efficiency, holding constant domestic, export and import prices and primary input availability.

A terms of trade effect index is also constructed using export and import shares in net output as weights. The terms of trade effect index shows the change in domestic product resulting from export and import price changes, holding constant domestic prices, primary input availability and the production technology.

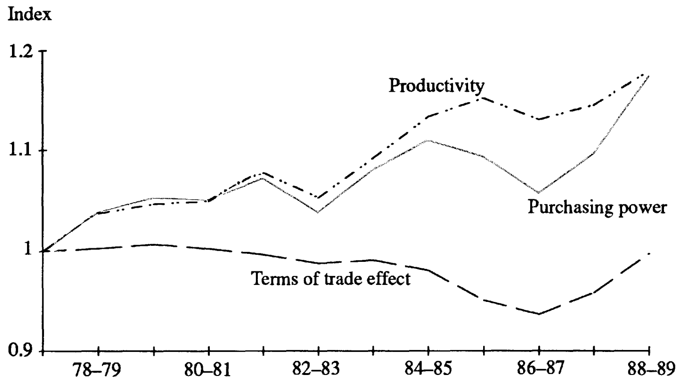
Finally, the changes in domestic product resulting from both productivity change and the terms of trade effect can be combined to form an index of purchasing power which measures the unit output which is (potentially) available to improve domestic living standards.

The results of the analysis are presented in figure A2.2. Over the period 1977–78 to 1988–89, the productivity index is almost identical to the ABS multifactor series. Minor but insignificant differences arise due to differences in the methodology used. Productivity has grown steadily over the period with falls occurring only in the recession years of 1982–83 and 1986–87.

Apart from the latest two years, the contribution of Australia's terms of trade effect to output changes has generally been small or negative. After remaining virtually unchanged for the first half of the period, the terms of trade effect declined markedly between 1983–84 and 1986–87. The latest two years of the series saw a marked upturn in the contribution of terms of trade changes to domestic output, with a boom in commodity prices. Preliminary evidence for 1989–90 indicates that the terms of trade has fallen by 2.3 per cent (ABS 1990b). This will translate into a negative contribution to purchasing power.

The purchasing power index followed the productivity index closely until 1982–83 when the terms of trade effect started to become increasingly negative. This lead to the gap between the purchasing power index and the productivity index increasing up until 1986–87. The purchasing power of domestic resources actually fell markedly in the two years following 1984–85 due to adverse terms of trade

Figure A2.2
Productivity, terms of trade effect and purchasing power indexes: 1977–78 to 1988–89



effects and poor productivity performance. Purchasing power has, however, increased sharply in the last two years of the series as modest productivity improvements combined with strongly favourable terms of trade effects. It should be noted, however, that while the purchasing power index provides a better indicator of changes in domestic living standards than does productivity change alone, a number of important influences on living standards are still not allowed for. Of particular significance is net income paid overseas to service increasing foreign debt. Between 1986–87 and 1989–90 net income paid overseas has increased as a proportion of GDP from 3.2 per cent to 4.3 per cent (ABS 1990b). This will have detracted from the contribution of favourable productivity and terms of trade movements to improved living standards.

For the 12 year period as a whole, Australia's productivity increased at a trend rate of 1.36 per cent a year while the terms of trade effect index declined at a trend rate of 0.44 per cent a year. This enabled the purchasing power measure to increase at a trend rate of 0.92 per cent a year.

The year to year changes in productivity, the terms of trade effect and purchasing power are presented in table A2.2. The largest decline in productivity occurred in 1982–83 with a fall of over 2 per cent. This combined with a 1 per cent adverse movement in the terms of trade effect to produce a 3 per cent fall in the purchasing power index. Strong productivity growth then ensued in 1983–84 and 1984–85.

Table A2.2
Changes in productivity, terms of trade effect and purchasing power: Australian market sector
(year to year percentage changes)

Year	*Productivity*	*Terms of trade effect*	*Purchasing power*
1978–79	3.68	0.22	3.91
1979–80	0.90	0.44	1.35
1980–81	0.24	- 0.45	- 0.21
1981–82	2.68	- 0.59	2.07
1982–83	- 2.29	- 0.88	- 3.15
1983–84	3.75	0.31	4.08
1984–85	3.80	- 1.02	2.74
1985–86	1.63	- 3.07	- 1.49
1986–87	- 1.86	- 1.47	- 3.31
1987–88	1.28	2.34	3.66
1988–89	2.95	4.06	7.13

More recently, the productivity decline of 1986–87 coincided with a period of large negative terms of trade effects to produce two years of decline in purchasing power. In 1988–89, 3 per cent growth in productivity was combined with the largest increase in the terms of trade effect to produce a large 7 per cent improvement in the purchasing power index. If Australia had not been boosted by this fortuitous improvement in commodity prices and the terms of trade effect had been negative by the same percentage as the average of the three years from 1984–85 to 1986–87, then purchasing power would have remained virtually unchanged. As noted above, preliminary evidence for 1989–90 indicates that the terms of trade have again moved against Australia with a fall in commodity prices.

Implications

Continuing and sustained productivity improvements are of paramount importance to Australia. As a commodity exporter facing a long-term trend decline in its terms of trade, Australia must achieve substantial productivity improvements simply to maintain the purchasing power of its resources and hence the living standards of its inhabitants at existing levels. If we fail to achieve continuing improvements in our productivity and efficiency, our international competitiveness will deteriorate and the living standards of Australians will fall. Continuing efforts in the field of microeconomic reform are essential as they provide an important means for achieving substantial productivity improvements.

Appendix 3
Productivity and the environment

The recent upsurge in community concern about protecting the environment and conserving resources has presented a number of challenges for policy making. There is much at stake. Environmental assets are valuable in their own right, while major sectors of the economy, like mining, agriculture, tourism and forest products, rely on access to natural resources and the environment to help generate the wherewithal for Australians to improve their standard of living.

The broad question of the extent to which we should protect and conserve the environment has no definitive answer. It ultimately depends on community attitudes and preferences — the value that Australians in general place on protection of environmental assets compared with the value that they place on 'use' of environmental assets. However, it is critical that the formation of attitudes and preferences be married with as full an understanding as possible of the consequences of environmental protection or use.

In keeping with the theme of this report, this appendix focuses on how environmental protection affects our productivity performance. They are, in fact, interdependent. Economic performance affects the environment and environmental quality affects economic performance. There are several dimensions to the interdependency.

- Preservation means there are fewer resources available for other current purposes. Either output is restricted or more expensive inputs have to be used.
- Formal procedures like Environmental Impact Assessment (EIA) reduce the risk of environmental damage, but they can also raise costs and cause delays.
- Measures to protect the environment (for example, pollution control) raise some costs and reduce productivity in the short term. Failure to protect the environment, on the other hand, may raise other costs in the long run. A rapid rate of use of resources to generate income may not be optimal if it unduly depletes the resource base for the future.
- Environmental policy instruments that succeed at minimum cost will have the least adverse effect on productivity.
- The environmental impacts of some industries affect the productivity and viability of other industries. For example, fishing is affected by pollution of waterways.
- Increasing productivity can have environmental benefits in that less resource inputs will be required for the same level of output. Also, to the extent that improved productivity raises incomes, attitudes toward environmental assets

may change, for example with greater emphasis on recreational use and preservation for heritage reasons.

These considerations suggest that protecting the environment can make good economic sense. Furthermore, greater emphasis on productivity, in terms of delivering environmental objectives more efficiently and using resources more efficiently, can be good for both the economy and the environment.

Getting it right is not just a matter of the extent to which we protect the environment. It is also a matter of how we protect the environment. If we fail to pay attention to both these issues, there is the dual danger that we will undermine our productivity performance unnecessarily and/or we will fail to protect our environmental assets adequately.

A focal point for community debate on these issues in Australia, as in many other countries, is the concept of sustainable development brought to world attention in the Brundtland report (World Commission on Environment and Development 1987). The central message of the Report is that it is possible for communities to meet the needs of the current generation without compromising the ability of future generations to meet their needs.

The sustainable development concept has been subsequently refined. In one important contribution, Pearce et al (1989) summarise sustainable development in terms of valuing the environment (emphasising natural, built and cultural environments), extending the time horizon for consideration of issues and providing for intra- and inter-generational equity. They develop the notion of a stock of wealth, made up of knowledge, technology, capital and environmental assets. To preserve the stock of wealth for future generations, present generations should provide compensation for reductions in the endowments of resources they bring about. Concepts such as the optimal use of resources over time and the optimal application of protection measures over time then follow.

Community discussion about sustainable development has the potential to clarify some of the key issues and choices we face. But the concept does lack precision, as the number of competing definitions attests, and it is difficult to make operational.

The Government has released a discussion paper on sustainable development and will be attempting to establish guidelines for application of the concept in nine key areas by June 1991 (Commonwealth of Australia 1990a). The Resource Assessment Commission, an independent body established to review resource matters, has a number of important inquiries under way that will explore key issues, provide relevant information and develop policy options. The Industry Commission, for its part, is examining environmental issues in references such as product recycling, mining and minerals processing, and energy generation and distribution.

These steps are part of a process of building a stock of knowledge about the consequences of alternative courses of action that affect the environment. Disseminating this information helps the community to understand what is at stake and to define its preferences. It also helps to ensure that government decisions give full consideration to the costs and benefits over the long term. Without publicly available information, there is the danger that governments will be unable to withstand short-term political pressures that do not necessarily serve the community interest. As it now stands, these pressures can be very strong because of the way incentives are structured. Rewards mostly come from appealing to the political process for a decision and from adopting absolutist positions. There are few rewards from seeking compromise.

The current approach to environmental protection in Australia can be characterised as the directive or the 'command and control' type. On the basis that markets left to themselves will not fulfil the community's preferences for environmental safeguards, elected representatives or their delegated authorities intervene to approve or reject development proposals and/or institute remedies to environmental problems that specify what can or cannot be done and sometimes how it can be done. Bans or limits on effluents and mandatory pollution controls on motor vehicles are examples.

Assessment procedures

The interventionist approach bypasses the usual source of information on how things are valued — the market place. Information has to be generated by other means. It is a demanding process, if it is undertaken seriously, especially in attempting to determine and value the environmental implications. Such demands usually require an EIA — a procedure that can add costs and delays. One study put the average length of an EIA at 17 months (Porter 1985). The difficulties in environmental impact assessment are compounded by the different approval processes that have to be encountered within and between the various government jurisdictions. Thus, while EIAs help to assess and reduce the risk of environmental damage, those benefits need to be weighed against the costs the process involves.

Moreover, the EIA procedures have flaws. Often they focus on elaboration of detailed physical and biological impacts and not on valuation of the environmental consequences (Nahan 1986). This is symptomatic of the more general failure to integrate environmental impact assessment within a comprehensive cost benefit study that would provide the community and decision makers with a richer information base to consider contentious proposals. Even so, where valuations are tackled, the range of precision in the techniques has to be recognised.[1]

1 For a survey of techniques see OECD (1989a).

Furthermore, EIA procedures involve a considerable degree of discretion, for example, about whether an EIS is needed, its specification and whether public comment will be invited. As the IAC noted in its report on travel and tourism in relation to environmental impact review, unchecked powers of discretion leave open the possibility that decisions reflect private interests and even corruption, rather than the national interest (IAC 1989b). The Commission considered that discretion was desirable to maintain flexibility, but that it needed to be disciplined by greater transparency. Public access to information can be used to hold decision-makers accountable.

Other problems include the lack of opportunity to review the cumulative effects of decisions. Proposals are normally dealt with on a piecemeal basis. Moreover, new proposals are singled out for particular attention, whereas the contribution of existing activities to environmental problems is often overlooked.[2] Higher environmental standards for new as opposed to old facilities have the incidental effect of acting as a barrier to new entrants to an industry by raising their potential costs, while existing producers continue to use older, higher polluting technologies at less cost.

There is also a time dimension. Community attitudes and preferences change, which means that environmental protection measures that were not seen as necessary at one point may be desirable at another time. Equally, implemented measures may outlive their usefulness. Furthermore, standards evolve and are progressively refined as more environmental information and better technology comes to hand. Thus it may not be possible or appropriate to give any guarantee of certainty at the time of assessment of investment proposals that the standards to be imposed will remain inviolable. Nevertheless, this should not give governments licence to create additional uncertainty by making arbitrary changes (IC 1990a, p. 11).

Measures to protect the environment

Reliance on directive 'command and control' remedies to environmental problems has significant dangers. The approach is to regulate for outcomes (for example, emission standards, fauna protection) or means of environmental protection (for example, the best practice technology or modifications to plant and equipment). Rarely is there explicit consideration of the costs and benefits of these remedies, or whether cheaper alternatives are available.

There is also a set of issues concerning the regional focus of environmental measures. There is a tendency toward uniformity in standards, irrespective of geographical location and ecological factors. Indeed, the States of Australia are seeking greater uniformity in at least some environmental standards and how they are implemented. These moves are generally supported by industry and environment groups, most probably in the hope that this will leave less room for arbitrary change and thereby provide greater certainty in governments' approaches.

2 This issue was identified as a concern in IC (1990a).

But these uniform standards overlook the capacity of different areas to cope with environmental pressures. For example, discharging some pollutants into an inland river or lake can be much more damaging than discharge into a fast-flowing ocean current (IC 1990a, p. 80). To impose the same standards and remedies in both cases would impose an unnecessary cost burden on activities adjacent to the ocean.

A related issue concerns the response to global issues. An important case in point is reduction in greenhouse gas emissions. While there are moves to tackle emissions through global measures, there are also pressures for Australia to act unilaterally as a demonstration of its commitment to this issue. A number of studies have shown that reductions in greenhouse gases could be expensive to achieve.[3] Unilateral action might have perverse effects. While the competitiveness of Australia could be undermined, the higher polluting countries could become more competitive and would gain market share. Total global emissions could increase as a result.

[illegible]

Aside from the question of the extent to which we should protect the environment, these issues add up to significant doubts about how well environmental protection is implemented. Productivity performance and the protection of environmental assets are both at stake. Clearly, something needs to be done. The following observations are based on the Commission's consideration of environmental issues to date.

- Information is important in facilitating community understanding of the choices about the use and preservation of environmental assets. We need information on the cost and benefit implications of development proposals and any environmental remedies considered.
- Environmental assessment procedures should be invoked flexibly, taking account of the costs of the decision-making process and attendant delays and uncertainties, on the one hand, and the risk of environmental damage, on the other.
- There needs to be more emphasis on examining the costs and benefits of proposals, particularly in potentially contentious cases. For example, proposals for new national parks should be subjected to more explicit cost benefit analysis.
- Procedures for reaching a decision need to be transparent, and provide scope for public involvement and for public scrutiny of the information and process. These safeguards provide the check on the misuse of discretion.

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3 A recent commissioned study (Marks et al 1989) estimated that meeting the Toronto Agreement target of a 20 per cent reduction in greenhouse emissions would cost Australia $30 billion in GDP. See also Manne and Richels (1989).

- Environmental remedies should employ cost effective means of tackling environmental issues and, where possible, should cover all contributors to environmental problems, rather than focus on new proposals.
- Environmental measures need to be targeted as precisely as possible to the particular problem under consideration, and allow for regional variation in environmental impacts.
- Decisions should be reviewed as circumstances, technologies and values change and as effects accumulate to ensure that community preferences continue to be fulfilled.
- Environmental remedies should provide the broadest scope possible for flexibility in meeting an environmental objective, rather than rely on rigid, directive controls.
- Government should avoid arbitrary changes in their stances toward environmental safeguards.

Improving the mechanisms

These considerations form a basis for improving the current system of environmental review and protection, with its reliance on government control. However, if improvements along these lines were instituted, we may come to see advantages in placing greater reliance on market mechanisms to help sort out the 'How much?' and the 'How?' of environmental protection.

There is a tendency in some sections of the environment debate to portray markets as being inimical to environmental concerns. In fact, as is increasingly being recognised, markets and the environment can and do work well together in certain circumstances. Markets fail or do not even exist in some cases. But in others, environmental problems arise not because markets do not work, but because markets are not allowed to work. For example, the price of access to forests affects the way in which forest resources are used. Yet forests in Australia are generally underpriced for recreational and commercial use and are often subject to long-term arrangements that prevent alternative prices or uses from emerging.[4] Another example is salinity from over-irrigation. The underpricing of irrigation water reduces the incentive to apply optimum quantities of water (IAC 1987c).

Allowing markets to work better was the thrust of the Commission's approach in its interim report on paper recycling (IC 1990b). The Commission considered that greater attention to the appropriate pricing and supply of sawlogs, pulpwood and waste management would bring both productivity and environmental benefits. Government attempts to coerce producers and consumers to change their behaviour toward recycling through discriminatory purchasing policies, tax concessions or mandated or 'voluntary' targets would merely compound inefficiencies. Rather

4 The Commission presented some evidence on underpricing of forest resources in its interim report on paper recycling. See IC (1990b).

than encourage recycling, they could have the perverse effect of increasing domestic costs of making paper products, leading to increased imports of recycled paper, pulp and paper products.

Market-based measures span a spectrum, with complete reliance on the market at one end and 'command and control' intervention at the other. Where on the spectrum the appropriate measures might lie depends on a case-by-case assessment. No single class of measure can be adopted as a general approach.

The market-oriented end of the spectrum relies heavily on allocating property rights — the vesting of ownership and control of resources in private hands. The argument is that with ownership and control, private interests have greater incentive to protect environmental assets.[5]

This approach has been used to advocate the transfer of ownership of environmentally-sensitive manufactured assets from government to private hands. For example, it is argued that the provision of water, energy and transport by private interests can reduce environmental damage by improving efficiency (and therefore reducing the call on natural resources), reducing surplus labour and hence reducing the cost of environmental improvements, and eliminating over-production by linking prices (and hence outputs) to costs of production (Helm and Pearce 1990).

A more fundamental challenge of the property rights approach is to foster private ownership of environmental assets. For example, conservation interests could be allowed or encouraged to gain direct control as a means of protecting the environment. There are examples of this approach in other countries. Conservation groups have purchased lands in the USA to protect endangered species. In England, owners of private fishing rights have a say in activities upstream that would pollute river water (Smith 1990).

For this approach to work, property rights have to be well defined, enforceable and transferable. It will not work in cases where property rights over things like air, the ozone layer and scenic views, cannot be conferred. Even in cases where property rights can be established, consideration needs to be given to the appropriateness of the initial allocation of property rights, the costs of organising funding among disparate groups, the 'free-rider' problem of beneficiaries who avoid contributing, and the existence of monopoly power which may distort the bargaining ability of interested parties. However, with some imagination in design and administration, property rights can be appropriately conferred in a number of cases. Once property rights are established, the market can be used to allocate environmental resources to the use that generates the highest value, including conservation. The market then reveals the community preferences for environmental protection or development.

In the middle of the spectrum, there is a range of measures that employ a mix of market and interventionist measures. There are tradeable permits which are

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5 This is not to deny that, for reasons unrelated to property rights, some landholders may allow degradation of their land.

normally associated with controlling pollution. The total permissible quantity of pollution is determined administratively. But the market is used, through trading, to allocate the rights to pollute within tolerable limits. Through the incentives that trading in permits provides: pollution is reduced in plants and firms where it is most easily and cheaply achieved; the installation of processes and plants that are environmentally benign and the development of pollution abatement technology are encouraged; and all polluters — new and old — are brought within the scheme.

The tradeable permits approach does not apply to pollution only. For example, it can be used in the irrigation problem mentioned above. Total water entitlements can be set and trading in permits provides an incentive for users to improve the efficiency of their water use (IAC 1987c). Trading has been introduced in some instances (see appendix 5). Tradeable permits are also in place in fisheries to encourage efficient activity within catch limits designed to preserve the breeding stock (IAC 1984).

Polluter-pays taxes are a relatively well-known form of market-based measure. Imposing a tax creates a disincentive to pollute through an additional charge to reflect the environmental costs that are imposed on others. To be used properly, polluter-pays taxes require very detailed information on the effects of the pollution on a case-by-case basis.

The idea behind the market-based incentives approach is to move away from the direct control of production and investment decisions and alter the incentives that individuals face so that those with superior information on production methods can select the cheapest means of effectively protecting the environment. If properly designed, market-based mechanisms can help produce environmentally optimal results that are also least-cost.[6] But even where the market-based approach will not work perfectly, any shortcomings should be compared with the failings in the direct intervention approach.

The directive approach, relying on regulatory measures, marks the other end of the spectrum. As discussed above, these measures can have unintended effects, sapping productivity performance unnecessarily and failing to safeguard the environment to the extent desired. But there is a range of circumstances in which regulation may be the appropriate way. For example, there may be some activity that has unavoidable disastrous consequences associated with it (for example, nuclear explosions). Alternatively, enforcement costs of a market-based mechanism may be too high. For example, control of firelighting in national parks by regulation (supported by spot checks and fines) may be the only practical option.

Market-based incentives have been shown to help the implementation of environmental policy in other countries (Hahn 1989). By integrating economic approaches with environmental objectives, they broaden the range of policy instruments that governments have at their disposal to tackle environmental issues. The market-based approach will not be appropriate in all cases. But the likely

6 Some market-based mechanisms may be restricted by the thinness of the market; for example, no or few other firms to trade within a particular region.

advantages of greater flexibility and efficiency in delivery mean that the market-incentives approach warrants much more serious consideration in Australian cases. It would help determine not only how much environmental protection we should have, but also how we should best implement it.

Appendix 4
Strategic trade theory and the East Asian experience

A feature of the international trade theory literature in recent years has been the development of ideas that, under certain conditions, government interventions which favour particular sectors can improve national economic welfare. The new 'strategic trade theories' have been offered as intellectual support for policies which target key sectors of the economy. It is claimed that there is good evidence that these policies can work well in practice and have contributed to the impressive growth performance of East Asian economies such as Japan and Korea.

In its 1988–89 Annual Report the IAC reviewed strategic trade theories and found that they are based on assumptions that do not easily hold. Further, it found that these theories are largely unworkable because of implementation problems.

The Commission has subsequently studied the growth experiences of Japan and the Dynamic Asian Economies (DAEs) of Korea, Taiwan, Hong Kong and Singapore in an attempt to understand better the role of government intervention in their exceptional economic success.[1] Their historical experiences and key economic, social and institutional features were carefully considered in order to identify common factors that supported growth. The importance of strategic trade policy was considered in the context of these common factors. Strategic trade intervention was not identified as an essential common factor and was not present at all in Hong Kong. Finally, an assessment was made of the lessons from the East Asian experience for Australia.

Although historical, economic, political and social factors differed in each of the five East Asian economies, they were found to have faced a set of key common factors. These were:

- Each economy faced a period of crisis or rapid and widespread change before the rapid growth phase.
- In one way or another the crisis contributed to the emergence of a strong social consensus in favour of growth and provided a flexible and responsive economic environment.
- With the exception of Hong Kong, where the role of the government has been strictly non-interventionist, governments have had strong or effective political control in the rapid growth phases.

1 The detailed findings of the study are reported in IC (1990f).

- There was considerable scope for 'catching up' in the use of technology and production methods.
- Once rapid growth began, it was sustained by vigorous competition either domestically (Japan) or internationally (DAEs) and by high investment and high saving rates.
- The competitive environment was underpinned by a plentiful, flexible and competitive labour supply — one of the most important common factors.

Crisis and social consensus for growth

In the aftermath of World War II the Japanese people quickly developed a strong, shared motivation to rebuild their economy and regain national pride. Survival and prosperity demanded hard work and the defeat meant that old leadership groups and numerous coalitional arrangements were pushed aside. The strong growth consensus was frequently emphasised in pronouncements by political leaders and influential bureaucrats. And it was reinforced by the Japanese tradition of respect for group objectives.

Difficult political and economic circumstances also preceded the rapid growth phases in the DAEs. In Hong Kong, rapid and sustained growth began after the communist upheaval in China in the late 1940s led to an influx of refugees. This provided a substantial pool of labour, capital and entrepreneurial skill which combined with the liberal economic environment and favourable world trade conditions.

In Singapore the collapse of the union with Malaysia in 1965 was the turning point, forcing a reconsideration of trade policy towards an export-oriented strategy. The period of political instability and the migrant character of much of the population meant that Singaporeans were willing to embrace change and set a premium on hard work. As in Hong Kong, the Government's housing program was a key element in promoting social cohesiveness.

Korea and Taiwan also experienced very difficult times before their rapid growth. The Korean war caused considerable devastation and for many years Taiwan was affected by the civil war in China.

In the 1950s Korea was characterised by an autocratic leadership which emphasised political concerns and frequently used police powers. A military coup in 1961 was followed, a few years later, by a dramatic change in policy which emphasised the export of labour intensive manufactures. Strong, cohesive leadership and respect for the highly motivated, well trained civil service were key factors in achieving an effective role for the Government.

In Taiwan the Government preferred to be broadly supportive rather than interventionist. Support was provided for exports of labour intensive manufactures, but in a less targeted form than in Korea, and the economy was able to draw on a large number of traders from mainland China.

The consensus to achieve growth was strong in each of these economies, with people generally accepting that prosperity demanded sacrifices and a strong commitment to work. Even today, people in these five economies work more hours a week, have greater labour market flexibility, and have less absenteeism and industrial disputes than in their key trading partners and competitors. One factor which contributed to the development and maintenance of the social consensus for growth was that the economic gains were broadly shared. By international standards, income inequality was generally low to moderate in Japan and the DAEs in the rapid growth phases.

The strong social consensus for growth, together with more executive autonomy than is normal in developed country democracies, meant that governments were able to isolate themselves from the demands of many (but not all) special interests.

Technological catch up

The defeat in World War II destroyed Japan's 'proper order of things', removing many of the social and legal restrictions that had inhibited new activities. There was a new environment conducive to the effective transfer of technology and modern production methods. This means of achieving growth, known as technological catch up, is very effective as it avoids expensive research and development.

The manufacturing and business bases developed before the war meant that Japan had the technological capability and business experience to assimilate, and eventually improve upon, advanced technology from the United States and elsewhere. One study estimated that, between 1960 and 1973, the catch up factor could explain up to 70 per cent of the difference between labour productivity growth in Japan and the United States (Abramovitz 1990).

However, government intervention did encourage and direct technology transfer into profitable sectors. During the reconstruction phase after World War II, the Korean war boom and even in the rapid growth phase of the 1960s, the authorities, in collaboration with the private sector chose sectors for development by observing growth patterns in the West. The strong social consensus, vigorous, entrepreneurial efforts of the private sector, elite and well trained bureaucrats and favourable international economic conditions, facilitated the process.

The experiences of the DAEs have been similar. They imported foreign technology and know-how and adapted it to take full advantage of their abundant, competitive labour. Historical circumstances meant that these economies possessed the social and economic capability to achieve rapid 'catch up' at a time when technological advances facilitated the transfer of technology and world markets were very favourable.

Initially technology transfer focused on industries which used unskilled labour intensively, such as textiles, clothing, footwear and furniture. However, as wages and living standards rose, the comparative advantage gradually shifted towards industries which were more capital and skilled labour intensive, such as motor vehicles, metal products and electrical appliances. One study suggests that Japan's comparative advantage in skilled labour intensive manufactures — as revealed by its trade performance — was already greater by the early 1970s than its advantage in unskilled labour intensive products. Hong Kong and Korea showed a similar trend over the period 1970 to 1985 but, because their development commenced later, they were still heavily reliant on exports of unskilled labour intensive manufactures in the 1980s. In 1987 some 35 per cent of the exports of Korea and Hong Kong were textile, clothing and footwear products.

Japan and the DAEs have also been effective in mobilising large supplies of savings to finance the substantial investments required for the successful transfer of modern technologies. Investment was required to start the growth process and considerable investment and high saving rates helped to sustain it, but high saving rates were not a prerequisite for initiating growth. In the early years the DAEs relied heavily on aid and borrowing to finance substantial investment, but higher incomes generated large domestic savings.

In economies with rapidly growing per capita incomes it might be expected that savings would rise because the saving of younger generations (who will have a higher lifetime income) would more than offset the dissaving of older generations. However, it seems that the momentum of this factor was supported by other economic and institutional features — including the limited availability of mortgage and consumer credit, limited social security systems, favourable tax treatment of saving in Japan and compulsory saving contributions in Singapore.

Competitive product markets

Sustained and substantial competitive pressure has been important to success. In the case of the DAEs this came from export orientation. Over the period 1979 to 1989, the value of Singapore's exports trebled and those of Korea, Hong Kong and Taiwan more than quadrupled.

In Japan the competitiveness of firms that have achieved global dominance has been honed in the domestic market before exposure to export markets. In a recent study Porter (1990) concluded that, in the countries his team of researchers studied, domestic rivalry was the most important factor leading to competitive advantage. This was especially important in Japan, where there are large numbers of rival firms — usually measured in double digit figures — in all successful industries. Anti-monopoly reforms were undertaken in Japan during the late 1940s and these provided an initial basis for fierce competition in the domestic market.

Competitive labour markets

Competition in product markets was important in maintaining pressure on firms to innovate. Flexible and competitive labour markets made possible increased productivity. Labour markets were characterised in Japan and the DAEs in their periods of take-off by hard working employees, low wages compared with trading partners, and responsiveness in wages and employment to changes in economic circumstances.

With the exception of wages in Japan, these characteristics were still evident in 1987. In that year average weekly hours worked in the DAEs were close to 50 compared with 38 in Australia (table A4.1). Wages of production workers at around $US2 an hour were 20 per cent of those in Australia. Japan and the DAEs also rated highly in their ability to adjust wages and job security to economic circumstances.

Other competitiveness measures published by the Swiss based World Economic Forum show that the DAEs have also scored well above Australia for low absenteeism, worker motivation and labour's willingness to relocate, retrain, assume new functions and accept labour-saving technology.

Table A4.1
Indicators of labour market characteristics: 1987

	Hourly wage rates in manufacturing [a]	*Working week* [b]	*Labour cost flexibility* [c]
	$US	*hours*	*index*
Dynamic Asian economies			
Korea	1.8	54.0	53.7
Taiwan	2.2	48.0	56.7
Hong Kong	2.1	47.0	78.6
Singapore	2.4	49.0	71.6
OECD economies			
Japan	11.1	41.3	54.8
United States	13.4	41.0	71.6
Germany	16.9	40.1	37.2
United Kingdom	9.0	42.2	66.9
Sweden	15.1	36.2	44.3
Australia	9.2	37.6	43.7

a Total compensation for production workers (wage and supplementary benefits).

b Hours actually worked per worker a week in non-agricultural activities.

c Flexibility to adjust wages and job security to economic realities (0 = none, 100 = a great deal of flexibility). Scores were derived from a survey of close to 2000 executives in 32 countries.

Source: World Economic Forum (1989).

The extent to which governments intervened and practised strategic policies varied considerably, not only between countries, but often also over time within a particular country. At times Korea was highly interventionist while Hong Kong is the outstanding example of the benefits of free markets, in an environment that protects private property and provides public safety.

The five East Asian economies experienced rapid growth regardless of the extent of strategic trade interventions practised. Growth occurred at times when assistance was high, but also when it was low. In Hong Kong growth has been sustained for a long period without any such interventions. Clearly, many factors other than government support were at play.

Extent of interventions

Japan's industry policies have received a great deal of attention from trading partners and competitors. However, United States and British studies have concluded that Japanese subsidies to industries in the 1950s and 1960s were small relative to those in their home economies. During the 1970s Japan phased out most of its assistance measures, the major exception being agriculture where protection was maintained and now is amongst the highest in the world. Subsidies, government sponsored research and development and tariffs are currently smaller than in most major OECD countries and non-tariff barriers declined relative to other major OECD countries in the first half of the 1980s (table A4.2).

More recently attention has shifted to Japan's business practices which — by making penetration of its markets difficult for foreigners — are seen by some as 'hidden' trade barriers. The business practices include: the long-term contract arrangements of the Keiretsu (company grouping); the difficulties of entering the Japanese market through mergers and acquisitions; and the complex distribution and retail system. In its recent survey of Japan the OECD (1989d) notes that, while change has been slow, these practices are nevertheless gradually being relaxed. It should be noted, however, that many of these are also a hindrance to Japanese as well as foreign companies. As well the Japanese faced their own difficulties when they initially attempted to enter foreign markets because of differences in trading practices, but they were sufficiently motivated to overcome them.

Table A4.2
Tariffs, subsidies and non-tariff barriers, selected OECD countries: mid–1980s

	Tariffs[a] *(1985)*	*Subsidies*[b] *(as a per cent of GDP 1988)*	*Government share of private R&D*[c] *(1985)*	*Non-tariff barriers*[d] *(1986)*
	%	%	%	*1981=100*
United States	3.5	0.6	33.9	123.0
Japan	2.4	0.9	1.6	98.6
OECD Europe	na	2.5	na	118.3
Germany	1.3	2.3	15.3	na
Australia	9.8	1.2	9.4[e]	na

na Not available.
a Receipts from Customs and import duties as a share of imports, OECD (1987 and 1988).
b Total subsidies, OECD (1990d).
c Proportion of total R&D expenditure in the enterprise sector directly financed by government, OECD (1989c).
d Import coverage index of a broad group of non-tariff barriers, World Bank (1987).
e 1984.

In Japan, the underdeveloped nature of capital markets during the rapid growth phase allowed governments considerable scope for directing the flow of finances. Credit rationing through the Bank of Japan, Ministry of Finance and the Japan Development Bank was used to allocate financial resources selectively to strategic industries. Some have argued that the major contribution of government to the success of Japan was to substitute for the lack of a well developed capital market: that is, to undertake and coordinate financial dealings (which in Western economies would normally be carried out by private institutions).

In developed countries where similar interventions have been tried it can be argued that they have failed because: the growth consensus was weak (so that significant leakage of funds occurred towards other objectives — for example, employment, regional development); the Government and bureaucracy did not have effective control; and financial markets were relatively well developed. As Western-style capital markets developed in Japan, the role of government in financial matters has declined.

In Korea, assistance was high until the mid-1970s. However, substantial trade liberalisation has occurred since then. Export incentives as a share of the value of exports declined from 30 per cent to 16 per cent by 1979 and tariffs were reduced from around 40 per cent to 20 per cent by the mid-1980s. In Singapore, the Government actively promoted exports in the early 1970s. Currently, however, export subsidies are either low or negligible. The Government still intervenes in the form of advice but its main role is to provide social and industrial infrastructure. In Taiwan, imports have been increasingly liberalised since the 1960s and export assistance has been of a more uniform, less targeted kind than in Korea. In Hong Kong the role of the Government has been mainly limited to the maintenance of law and order and the provision of public infrastructure for the past 40 years.

The Korean Government used the control of credit as its main tool in implementing the 1972 to 1979 heavy industrialisation drive. In doing this, it distorted credit markets, encouraged over-indebtedness and favoured the formation of chaebol (giant conglomerates) which meant a concentration of industrial power. As will be seen below, the Korean Government's attempt to 'pick winners' through the heavy industrialisation program failed. By the 1980s substantial policy changes occurred, with emphasis on deregulation and trade liberalisation.

Governments in Hong Kong, Singapore and Taiwan adopted a less dirigiste approach to finance than in Japan and Korea. In these countries, businesses generally used their own funds, relying on foreign affiliates and joint ventures when necessary.

In summary, in Japan and each of the DAEs specific industry assistance is now either low or has been on the decline in recent years. The issue of whether or not strategic trade policies were instrumental to the success of Japan and the DAEs is discussed later.

The limits of government involvement

In Korea, Taiwan and Singapore, selective export assistance has been used to various degrees. Two conditions were essential for the successful implementation of this strategy. Firstly, it was important for export assistance at least to offset the anti-import bias of the inherited protection regime by providing rapid access to duty free inputs at world market prices. Secondly, real exchange rates were maintained at competitive levels by ensuring that real wages were not out of line with the level and growth of productivity.

At times the DAEs deviated from these conditions and encountered failure. Korea provides a good example. The successful export-oriented drive from 1964 to 1971 was narrowly based, concentrating on labour intensive sectors, such as textiles, clothing and footwear. In the 1970s the Government grew overconfident of its planning ability and embarked on a heavy industrialisation program. The focus on providing access to inputs at world prices was lost. By the mid-1970s the Korean economy was losing competitiveness and in 1980 growth in real GNP was negative (- 5 per cent). Problems that were becoming evident included duplicated investments, excess capacity and bankruptcies in the heavy industrial sectors.

Developments in Korea and Taiwan between 1987 and 1989, and in Singapore in the mid-1980s, also highlight the importance of maintaining real exchange rates at competitive levels. As real exchange rates rose dramatically in these periods, growth faltered or stalled.

In considering the extent of interventions in the five East Asian economies studied, it is important to bear in mind that many other countries have also provided similar or more extensive support to several of their industries without success. Europe's high technology conglomerate effort, the Airbus project, has received considerable assistance for some 20 years. Profits are not expected until 1995, a quarter of a century after the project initially attracted high subsidies, and this is in a period when the world aircraft market has been booming.

Perhaps the most distinguishing charcteristic of government intervention in Japan and the DAEs was, with some exceptions, its temporary nature. Support measures were wound back within a decade and failures did not continue to receive assistance. Examples include the removal of assistance after successfully winding back capacity in industries designated 'structurally depressed' in Japan (for example, synthetic fibres and shipbuilding) and the removal of assistance to Singapore's car manufacturers when it became clear that they could not survive on their own over the long term.

Successes and failures of strategic interventions

At the individual industry level in Japan, the classic success examples are cars and computers. Both received considerable government attention in the 1950s and became major producer-exporters, initially following developed country practices. Although government involvement declined significantly after the 1960s, these industries continued to develop and grow. By the 1980s they were world leaders in both technology and design.

However, the extent to which government involvement has been instrumental in the success of these and other industries in Japan is not clear since there were several failed attempts by the Ministry of International Trade and Industry (MITI) to 'guide' industry development. Well known examples include:

- the failure of MITI's idea of a 'people's car' — a single model to be produced by one officially designated company;
- Honda's entry and success in motor vehicle production despite strong opposition from MITI which was intent on consolidating the Japanese car industry; and
- Sony's success in the commercial application of transistor technology despite MITI's view that the venture was unpromising and its direct hindrance of Sony in the procurement of transistors.

These examples illustrate that some businesses were successful with intervention, others without intervention, and yet others in spite of intervention. Also, several assisted industries never became internationally competitive. Examples in Japan include the petroleum and petrochemical industries which have been earmarked as 'strategic' since the early post war years. The petroleum industry has been heavily regulated since, with government control over refinery entry, crude oil imports and domestic pricing. The upstream petrochemical industries are still forced to purchase, despite strong protests, the higher priced domestically produced naphtha.

Despite continued government involvement, both these industries are today highly fragmented and plagued by overcapacity.

In Taiwan, one example of 'failure' is the car industry — a success story in Japan. In the 1960s, the Government encouraged foreign investment in car plants through large tax incentives and a 75 per cent tariff. Although tariffs will be reduced to 30 per cent by the end of 1990, currently there are seven companies assembling motor vehicles and 500 firms producing parts in Taiwan — with a population of only 20 million people. A drastic shake-out is expected to take place within the next few years.

In Singapore, the Government failed in its attempt to encourage high value-added manufacturing by mandating considerable increases in wages. The policy had to be abandoned after the substantial decline in GDP in 1985.

As noted above, the heavy industrialisation program embarked on in Korea from 1972 to 1979 is generally recognised as a 'failure'. With the realisation that the substitution of bureaucratic judgement for market forces slowed economic growth, the Government tried to allow markets to work more effectively. However, it encountered difficulties due to the close relationships developed between government and industry. Rather than go ahead with the painful but necessary adjustment, firms in difficulty continued to borrow — and waited for public bail outs.

The above examples suggest that, at the individual industry or sector level, there is no obvious correlation between government intervention and industry performance. The same lack of correlation is indicated by the available broad-based statistics. For Japan and Korea, these show that outstanding output growth occurred in both targeted and non-targeted industries. In Japan, for example, the assisted car and computer industries grew at rates well above the manufacturing average between the mid-1960s and mid-1980s, while steel — the subject of strategic interventions in the 1950s — experienced below average growth in the 1950s. The examples of Sony and Honda, as well as the finished metal goods sector, show that the achievement of good performance was possible without strategic interventions.

In Korea, several of the industries designated as strategic during the heavy industrialisation drive in the 1970s were already growth leaders in the 1960s (for example, transport equipment and steel). While growth in these industries was boosted following government support — with rates over 30 per cent a year not being uncommon — similarly high growth was also achieved in the same period by several other industries, such as footwear, metal products and electrical and scientific equipment.

The mixed evidence from Japan, Korea, Singapore and Taiwan, and the absence of strategic policies in Hong Kong, support the proposition that government targeting had only a relatively minor influence on the exceptional growth performance of the five East Asian economies.

These observations are in line with the findings of several large-scale econometric studies. For example, one study spanning the period 1959 to 1973 found that in general Japan's trade could be well explained by the factors suggested by standard trade theory (Saxonhouse 1983). Once differences in the capital stock, labour force, educational attainment and natural resources were allowed for there was little left over for industrial policy to explain. Trade for only 17 of 109 commodities studied was found to have been significantly influenced by factors such as government support. These 17 commodities comprised food products, glass, aluminium and zinc, footwear, aircraft, and photographic, medical and musical instruments — none of them known for having received particularly high levels of assistance in Japan. Despite major differences in the modelling framework, country coverage and the time period studied, the conclusions of the other analyses are remarkably similar. These are that, in each of the countries considered, assistance to manufacturing had little effect on the performance of the industries subject to government attention.

Overall, rapid growth has been made possible by the presence, at the right time, of certain key economic and social factors. Strategic trade policies have been neither a necessary nor a sufficient condition for the success of the East Asian economies studied.

Costs of rapid growth

In Japan and the DAEs, rapid economic growth came at a cost. Rising air and water pollution, neglect of social welfare programs and the family sacrifices associated with long hours of hard work were accepted by the communities at the time because of their general commitment to growth. These costs were tolerated because the alternatives offered meagre income standards.

As living standards rose, there was less and less acceptance of such costs, and the Japanese people began to weigh carefully the gains from industrial policies against their costs. The Government is now placing emphasis on measures to improve the quality of life of Japanese citizens. The latest vision of MITI, the Government's flagship industry policy department, now advocates a shorter working week, a shift toward an individual, rather than a company-oriented society, increased leisure opportunities, and greater attention to environmental issues (MITI 1990). In Korea, the pro-growth consensus no longer seems as strong, with increases in the frequency and length of strikes and demands for substantially higher real wages.

Catching up — lessons for Australia

Economic success in Japan and the DAEs cannot be closely associated with strategic government interventions. The more important factors explaining success are clearly the opportunities available to 'catch up' with the West, the removal of social and legal restrictions that inhibit new activities and the willingness to work hard for relatively low wages. There were instances where intervention was associated with successful development of industries, but there were also instances of it being associated with failures. There were successes without intervention and successes in spite of intervention. Hong Kong achieved high growth without any such policies. In the other four economies, while governments practised strategic trade policies at some time or another, there were many other factors that had much greater influence.

As these economies have become more developed there has been less willingness to allow the government the same executive autonomy as it had in the past. Distributional issues are now more of a concern and there are increasing demands for a higher quality of life.

In order to draw policy conclusions for Australia it is important to recognise some of our economic and institutional features.

Australia's natural isolation, history of protection and lack of competitive pressure have fostered a host of uncompetitive and inefficient practices. State regulations and controls and the existence of regulated government business enterprises have further segmented markets and restricted competition.

The Australian environment is also characterised by a labour market which is quite unlike those in Japan and the DAEs. The weakness of the craft-based union structure and the myriad of restrictions in the workplace are now being more exposed by the persistently inferior overall productivity performance of Australian industry.

The major common factors identified as important to the success of Japan and the DAEs are not present in Australia. Apart from the lack of significant 'catch up' opportunities because of Australia's developed country status, it is clear that the key ingredients missing are a strong pro-growth consensus, vigorous competition in product markets, and a flexible and competitive labour market.

In dealing with these legacies, Australia can learn some valuable lessons from the experiences of Japan and the DAEs.

Firstly, industry-specific assistance far from being a prerequisite for success is likely to be harmful, especially if it is extensive and maintained over long periods.

Secondly, policies which encourage competition, both in product and labour markets, should be vigorously pursued if economic performance is to be improved. This does not necessarily mean longer hours and lower wages. It is possible to have more leisure and income if productivity is higher. This could be achieved in labour markets through greater flexibility, greater effectiveness while on the job, and less industrial unrest.

Appendix 5
Progress on microeconomic reform

The message in this report is that microeconomic reform should proceed apace and on a broad front. To gain a clearer picture of the reforms that have already been implemented, the Commission has compiled a list of recent achievements within the Commonwealth, State and Territory jurisdictions.

The main points to emerge are:

- there has been substantial progress on implementing reforms;
- progress has been patchy, however, with areas such as tariffs, ports, rail and energy receiving most attention;
- in some areas, the States have been very active in reform;
- stirred by budgetary stress, the major focus of reform has been government business enterprises (GBEs); and
- to date, reforms to GBEs have tended to concentrate on administrative reforms (for example, rate of return targets and greater emphasis on cost recovery) rather than on competitive reforms (for example, removal of protective regulation, privatisation and corporatisation).

This initial stocktake is incomplete and uneven in nature. While it provides an indication of the broad sweep of reforms, it should not be relied on as a detailed and comprehensive review.

Compiling the list

The list of reforms is presented in two parts. The first covers the industries in which reforms have been implemented (pages 67–73). The second covers GBEs and it separately identifies competitive reforms and administrative reforms (pages 74–7). As GBEs are important elements in some industries, there are some overlaps.

In compiling the list, the Commission sought and relied on information from State and Territory Governments.[1] In some instances, the list has been supplemented with information that the Commission has to hand from current and recent inquiries. In the time available, a comprehensive listing has not been attempted. This list should therefore be viewed as a summary of major achievements.

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1 The main sources for the Commonwealth reforms were Hawke (1990a) and EPAC (1990). Information requests were sent to each State and Territory Government, except for New South Wales, for which the document NSW (1990) was the prime source. State and Territory Governments were involved in subsequent clarification and checking.

The review focuses on the 1989–90 year, but also covers some significant reforms in the previous year to provide a better indication of the extent of reform in this initial stocktake. Nevertheless, the review overlooks a number of significant reforms that were implemented even earlier. For example, some administrative reforms in Victorian GBEs (including the State Electricity Commission, the Gas and Fuel Corporation, V/Line and the Board of Works) were introduced five years ago.

The listing only covers reforms that have already been implemented and excludes those under active consideration or for which reform programs are being formulated. This has meant, for example, that many of the Tasmanian Government initiatives announced in its microeconomic reform program on 7 February 1990 have yet to be listed. Other States also have major reform programs underway that have not been transmitted into action. These should be picked up in future years as the initiatives are implemented.

Further:

- reforms in public administration, whilst common, have been excluded;
- changes in operating guidelines of GBEs (for example, rate of return targets and amendments to regulations) have been included, but other changes such as the introduction of new technology or practices that could be classed as part of usual management strategies have been excluded;[2]
- steps such as establishment of regulation review bodies (already implemented or underway in most States and Territories), while potentially important in bringing about reform, have not been included; and
- while available information on pricing reforms in GBEs has been included, increased cost recovery on a range of government services (for example, licensing operations) has been excluded because, in themselves, they are unlikely to have a substantial productivity payoff.

In future annual reports the listing will be refined and extended to include labour markets and industrial relations, environmental regulation, education and training.

2 Some information has been provided on the basis of outcomes (for example, reduction in staff numbers) without necessarily linking those outcomes to particular reforms.

Part A: Industry-specific reforms

Area of reform	Jurisdiction	Date of implementation	Nature of reform
Agriculture			
▪Tariffs	Commonwealth	May 1988	▪Assistance to sugar, dried vine fruits, tobacco and citrus converted to tariffs; general reductions in tariffs phased in annual steps; some domestic price arrangements liberalised (eg dairy); and fertiliser subsidy removed.
▪Marketing	NSW	1988–89	▪Egg industry deregulated; Egg Corporation sold.
	VIC	1989	▪Reform of the Egg Industry Act has reduced regulation and introduced more competition into the egg industry.
	VIC	1988–89	▪Price regulation in the citrus industry has been reduced; amalgamation of Citrus Marketing Boards in Victoria and NSW has reduced geographical barriers to competition.
	QLD	Feb 1989	▪Reduction in restrictions on the sale of hen quotas (for egg production).
	QLD	Oct 1989	▪Cotton Board and Ginger Marketing Board privatised.
	QLD	June 1990	▪Butter Marketing Board privatised.
	WA		▪Honey Pool privatised; Kimberley cattle industry restructured; and reforms to the marketing arrangements for potatoes, grain, dairy, meat and eggs.
	SA	1989	▪Dairy industry rationalised; SA Potato Board disbanded.

Area of reform	Jurisdiction	Date of implementation	Nature of reform
Mining	Commonwealth	Jan 1988	▪Oil marketing deregulated.
	WA	1990	▪Concessional royalty rate on coal sold to SECWA being phased out.
Manufacturing			
▪Tariffs	Commonwealth	May 1988	▪General reduction in tariffs to 15 per cent and 10 per cent phased in annual steps by July 1992 (except PMV and TCF).
▪Bread	NSW	1988	▪Bread baking laws and delivery times deregulated.
Transport			
▪Intrastate aviation	NSW	1989	▪Intrastate routes relicensed; more competitive airline structure established.
	WA	June 1989	▪Intrastate airfreight market deregulated.
▪Coastal shipping	Commonwealth	June 1989	▪3 year program to introduce more efficient vessels and reduce average size of crews.
▪Waterfront	Commonwealth/ States	June 1989	▪3 year program to introduce enterprise-based employment; reduced employment numbers; and increased competition at container depots.

Area of reform	Jurisdiction	Date of implementation	Nature of reform
▪Ports	NSW	July 1990	▪Port authorities restructured; charges more closely related to costs.
	VIC	July 1990	▪Charges for port services more closely related to costs.
	QLD	June 1990	▪Reform of port administration.
	WA	1988–90	▪Port authorities commercialised; charges more closely related to costs.
	SA	1990	▪Department of Marine and Harbours commercialised.
	NT	1989	▪Increase in competition in port services in Darwin with private port operators competing with the public port.
▪International sea transport	Commonwealth	1989	▪Legislation to encourage more competitive liner shipping; some ship import restrictions removed.
▪Buses	NSW	1988	▪Long distance and tourist services opened to competition; no restriction on routes or entry.
	WA	1988–90	▪Continued moves towards commercialisation; charges more closely related to costs.
	TAS	1990	▪Easing of regulation on competition on major routes.

Area of reform	Jurisdiction	Date of implementation	Nature of reform
▪Rail	NSW	1989	▪Intrastate freight transport market deregulated; uneconomic country passenger services closed.
	QLD	May 1990	▪Award restructuring and multiskilling in workshops; move towards single manning of trains.
	WA	1988–90	▪Competitive pricing for bulk fuel and grain introduced; fertiliser market deregulated; partial deregulation of timber; terminal and workshop operations rationalised; uneconomic lines closed; and cost-related fares structure introduced.
▪Grain handling	Commonwealth/ NSW	1988	▪Deregulation of storage, handling and transport environment.
	VIC	1988–89	▪Disaggregated charging by the Grain Elevators Board.
▪Roads	Commonwealth	1989	▪Harmonisation of road vehicle regulation through the National Vehicle Standards Act.
	NSW	July 1989	▪Petrol tax revenue hypothecated to road construction; construction of a private toll road commenced.
	WA		▪Road user charges introduced in deregulated areas of fuel, grain and fertiliser transport.
	NT		▪Permit and route controls on large combination vehicles removed.

Area of reform	Jurisdiction	Date of implementation	Nature of reform
Energy			
▪Electricity	NSW	July 1989	▪Charges more closely related to costs; reduced cross–subsidisation between users, performance agreements for distributors.
	VIC	1989–90	▪Cross-subsidies reduced; pricing structure rationalised.
	QLD		▪Services rationalised; competitive tendering for supply of equipment and fuel.
	WA	1989–90	▪Competitive tendering for a power station project.
	SA/TAS/NT	1989–90	▪Some services rationalised.
▪Natural gas	Commonwealth	1988	▪Administered pricing formula terminated; export controls eased.
	NSW	July 1990	▪Gas Act amended to promote more cost-effective regulation.
	VIC	1989–90	▪Cross-subsidies reduced; pricing more closely related to costs; pricing structure rationalised.
	QLD/WA	1988	▪Gas market deregulated.
	NT	1988	▪Private sector ownership and maintenance of some major infrastructure.

Area of reform	Jurisdiction	Date of implementation	Nature of reform
Building	NSW	1989–90	▪Joint public/private residential land development.
	VIC	1989–90	▪Early release of titles to assist project finance and easing of regulation; efficiencies in infrastructure and land use through provision for urban consolidation (eg dual occupancy).
	VIC	Sept 1990	▪Construction industry training levy to train and re-skill building industry workers.
	SA	1988	▪Departments of Lands and Housing and Construction (SACON) commercialised.
Telecom-munications	Commonwealth	1989	▪Telecommunications equipment markets liberalised in advance of sole reliance on a 15 per cent tariff in 1993.
Other Service Industries			
▪Licensing	NSW	July 1990	▪Licensing requirements for service station proprietors rationalised; local government licensing of retail food premises abolished; and other licence requirements rationalised.
	VIC	1988	▪Licensing structure simplified with the elmination of redundant licences.
	WA		▪Abolition of registration fees for many shops and factories; licensing and regulatory authorities rationalised; and reform of the business licensing systems to lower compliance costs.
▪Trading hours	NSW		▪Restrictions liberalised.

Area of reform	Jurisdiction	Date of implementation	Nature of reform
▪Water	NSW	1988	▪Charges more closely related to costs; market in tradeable water licences established.
	VIC	1989–90	▪More autonomy given to water authorities; pricing structure rationalised; and prices more closely related to costs.
	SA	1988	▪Engineering and Water Supply Department commercialised; charges more closely linked to cost of service.
	WA		▪More commercial pricing of services.
▪Tourism	NT		▪Small commercial vessels exempted from manning and survey requirements, reducing costs for tourist operations.

Part B: Government business enterprise (GBE) reforms

Area of Reform	Jurisdiction	Date of Implementation	Nature of Reform
Competitive Reforms			
▪Privatisation	Commonwealth	1988–90	▪Williamstown Naval Dock; aircraft factory (VIC).
	NSW	1988–89	▪NSW Investment Corporation; Transcover; business operations of the Egg Corporation; Mosman and District Community Hospital leased to private sector .
▪Corporatisation	Commonwealth	May	▪Controls eased on GBEs operations (Qantas, Australian Airlines, ANL, ANR, Telecom, OTC, and Australia Post) allowing greater autonomy in contracting and financing; Office of Defence Production corporatised.
	NSW	Nov 1989	▪Grain Corporation and State Bank of NSW.
▪Closure	NSW	1988	▪State Brickworks; Homebush Abattoir Corp; and Government Printing Office.

Area of Reform	Jurisdiction	Date of Implementation	Nature of Reform
▪Contracting out	NSW	1988–89	▪Printing services; increased contracting out of maintenance services by Public Works Department, especially construction work.
	NSW	May 1990	▪Cleaning and catering services in some public hospitals. ▪Some SRA operations including retail, catering, advertising; some country passenger operations tendered to private bus operators.
	VIC	1989–90	▪Phasing out unprofitable printing work and contracting this work out to private sector.
	ACT	1990	▪The Electricity and Water Authority is making greater use of contractors; competitive tendering applies.
▪Joint ventures with private sector	NSW		▪Residential land development.
	VIC	1988–89	▪Projects for co-generation of energy underway.

Area of Reform	Jurisdiction	Date of Implementation	Nature of Reform
Administrative Reforms			
▪Elcom	NSW	1988	▪Staff operating costs reduced; internal funding of interest payments and capital projects.
▪State Rail Authority	NSW	1988	▪Staff operating costs reduced; reduced reliance on government subsidy.
▪State Transit Authority	NSW	1988	▪Staff reductions.
▪Maritime Services Board	NSW	1988	▪Restructured; operating expenditure reduced and staff reductions.
▪Government Cleaning Service	NSW	June 1988	▪Staff reductions.
▪Engineering and Water Supply Dept.	SA	1989–90	▪Staff reductions; operations commercialised.
▪Marine and Harbours Dept.	SA		▪Operations commercialised.

Area of Reform	Jurisdiction	Date of Implementation	Nature of Reform
▪Lands Dept.	SA		▪Operations commercialised.
▪Housing and Construction	SA		▪Operations commercialised.
▪Water authorities	NSW	1988	▪Charges more closely related to costs; improved labour productivity.
	VIC	1989–90	▪Greater independence given to water authorities.
	WA	1988–90	▪Staff reductions; self-funding.
▪Public Transport Corp.	VIC	1989–90	▪Staff reductions; improved labour productivity.
▪SECV	VIC	1989–90	▪Staff reductions.
▪State port authorities	WA	1990	▪Operations commercialised; rate of return reporting.

Appendix 6
Developments in regulation review

Reforming unnecessary or inappropriate intervention by governments in the operations of the business sector is central to a policy of microeconomic reform. Over the years, the range of interventions has increased in Australia as regulations have been introduced to further a wide range of economic and social objectives. While these interventions have to varying degrees met their specific objectives, there is strong evidence that this has involved costs to the community generally through reducing the efficiency and flexibility of the economy.

The policy guidelines of the Industry Commission Act indicate the Commonwealth Government's intent to reduce regulation of industry — including regulation by the States and Territories — where this is consistent with the Government's social and economic goals.

Winding back regulation involves a systematic examination of the need for each intervention, its precise purpose and its likely benefits and costs. A policy stance of general deregulation is inappropriate because some regulations are necessary to establish a framework for market transactions and others provide benefits which exceed their costs.

Regulation review involves assessing present and proposed interventions against principles which are economically sound, acknowledging the role of the common law, and taking a realistic view of the ability of governments to determine efficient outcomes. Regulations need to be based on clear objectives and structured so as to have strong prospects of net benefits.

Regulation establishing the legal environment for business (for example, by defining property rights or obligations of parties in transactions) is often beneficial, although its administration is at times unnecessarily cumbersome. Similarly, appropriate intervention to prevent or control market monopolisation is widely accepted. However, other forms of economic regulation (for example, restrictions on the operation of competitive markets or specific assistance to selected firms) can favour some producers and have doubtful benefit from an economy-wide perspective.

Regulation may be the appropriate tool for pursuing social objectives (for example, a cleaner environment, safer workplaces, and better disclosure of information to consumers) in circumstances where:

- government intervention can better ensure that a decision-maker takes into account all the costs and benefits of that particular decision;
- the legal system does not allow sufficient redress for damage to individuals;

- excessively risky behaviour of individuals imposes substantial costs on the community; or
- broadly held ethical or moral standards of the community are breached.

Trends in Commonwealth regulation

The Government's microeconomic reform program has brought significant reductions and rationalisations in some areas of commercial regulation. Government controls on banking, foreign investment, the export of minerals, the quality and packaging of food, air freight, customs clearances, the building industry, primary industry, hospitals and television ownership have been reduced and/or made uniform throughout Australia. Further, major reforms are scheduled for domestic and international air travel, and the regulation of companies and securities, telecommunications, and broadcasting. The mining, energy and railways sectors are also currently under review.

The general trend of reductions in strictly commercial regulation is offset to some degree by increases in social regulation — such as consumer, employee and environmental protection laws. Social regulation can have a major impact on business costs and operations.

There has been a surge of subordinate legislation in the 1980s, particularly regulation created under authority delegated to Ministers or their departments by parent legislation. Most of this subordinate legislation either directly or indirectly affects the costs and operation of businesses. From 1982–83 to 1988–89, the number of individual items of subordinate legislation made by the Commonwealth Government almost doubled. All of this increase was accounted for by a five-fold increase in the amount of regulation created under ministerial or departmental sub-delegated authority (O'Keeffe 1989, p. 32).

Subordinate legislation is favoured by many regulators because it minimises parliamentary and public scrutiny. Thus, an important safeguard of the passing of legislation is avoided because there 'is minimal prior consultation and no formal process for the release of response drafts'(O'Keeffe 1989, p. 32).

Regulation review processes

The Commonwealth's regulation review procedures impose some discipline on the exercise of its regulation-making power and increase the transparency of proposed regulation to Ministers. Cabinet has determined guidelines which include a requirement to assess carefully the expected economic and social impact of proposed rules.

Where the Office of Regulation Review (ORR) considers a particular regulatory proposal to be badly designed or likely to have an adverse impact, it can require the matter be referred to the Cabinet. And, when this is done, better researched information on all associated costs and benefits is usually produced by the proposing agency.

However, in view of the increased rate of social regulation and the incentives for regulatory agencies to avoid central scrutiny, it is doubtful that these procedures are sufficient to prevent inadequately considered proposals from proceeding. Only a small proportion of new regulation is subjected to formal review. A further weakness of present arrangements is that much of the information on regulatory impact developed within agencies remains confidential, thus hindering informed debate of the policy merits of proposals in the Parliament and the community.[1]

A number of overseas countries, notably the USA, and some Australian States have adopted procedures which allow greater assessment and transparency in regulation making than is currently required by the Commonwealth. For example, in Victoria, the *Subordinate Legislation (Review and Revocation) Act 1984* requires Ministers in most circumstances to prepare a regulatory impact statement for public consultation before making a new statutory rule or remaking an old one. The Victorian Regulation Review Unit oversees the preparation of these statements. On occasions, the Legal and Constitutional Committee of the Victorian Parliament has recommended disallowing statutory rules where regulatory impact statements have not been prepared or are considered inadequate.

The New South Wales Government also has adopted legislation underpinning its regulation review policy. As well as introducing the staged repeal of existing regulation, the *Subordinate Legislation Act 1989* specifies that both new and reintroduced statutory rules are subject to regulatory impact assessment procedures. These procedures include: public notification of an intention to make a rule; a requirement for and the general availability of regulation impact statements; and the supervision of compliance by the Regulation Review Committee of the Parliament.

The Administrative Review Council has recently announced its intention to examine the general issues relating to the making of rules by Commonwealth agencies (ARC 1990).

Small business and regulation

Concerns about the adequacy of Commonwealth regulation making and review practices were expressed during the year by the House of Representatives Standing Committee on Industry, Science and Technology. In the report of its inquiry into the small business sector, the committee drew attention to the high costs of regulation for this sector (Beddall 1990a).[2] It concluded that present regulation

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1 In its 1986 and 1988 reports, the Senate Regulations and Ordinances Committee 'expressed its concern about the prevalence of new types of subordinate legislative instruments and the need to re-examine new and more widely used modes of delegated law-making' (O'Keeffe 1989, p. 32).

2 Since the committee's report was finalised, its Chairman, Mr D Beddall has been appointed the Minister for Customs and Small Business.

review procedures disadvantage small firms and it made a number of recommendations for reform including:

- all new legislation and regulation include a small business impact statement and the ORR be given a special brief to monitor these statements;
- the introduction of a federal paperwork reduction plan; and
- the ORR and the Department of Industry, Technology and Commerce propose means to simplify multiple Commonwealth/State/Local Government business licensing requirements and to improve firms' access to information about regulation.

The committee also recommended creating a House of Representatives Regulation and Ordinances Committee to inquire into regulation review. The Government has yet to respond to the proposals.

Major changes in selected areas of Commonwealth regulation

Therapeutic goods

The Therapeutic Goods Bill introduced into Parliament in 1989 seeks to establish a national system of controls on the levels of safety, quality and efficacy of therapeutic goods available for sale in Australia. Under the legislation, therapeutic goods are defined broadly and are required to be entered on a national register. The legislation will institutionalise and expand Commonwealth control over therapeutic goods marketed in Australia while financing, through its charging provisions, a laboratory with responsibility for testing compliance.

Although passed in January 1990, the Therapeutic Goods Bill will not come into operation until its associated regulations are approved by both Houses of Parliament.[3] The ORR has some reservations concerning this legislation. These relate to provisions which:

- provide for comprehensive control of all therapeutic goods, rather than targeting dangerous products,
- fail to rationalise the regulation of therapeutic goods Australia-wide; and
- specify the trade-limiting requirement that products for export must meet domestic standards.

Food and packaging

The efficiency of the regulatory environment of processed food — the largest industry grouping in Australia's manufacturing sector — was potentially increased by a number of significant government decisions taken following IAC and BRRU reports.

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3 In a unique arrangement, the passage of the Therapeutic Goods Act through the Senate was conditional on the subsequent approval of the associated regulations by both Houses of Parliament.

In June 1990 Commonwealth and State Health Ministers agreed to consider the establishment of a National Food Authority to replace the existing cumbersome arrangements for the development of food standards. As presently proposed, the independent authority will be required to use public consultation processes, give priority to food safety in its standard setting practices, and make decisions within prescribed times. A negotiating group of Commonwealth and State officials is developing detailed administrative arrangements, including the processes for consultation with the States. Subject to agreement between governments on these details, it is expected that the National Food Authority will commence operations on 1 July 1991.

With the exception of Western Australia, Commonwealth and State Consumer Affairs Ministers have agreed to abandon standard packaging requirements. These regulations limited the import and sale of a large number of commonly consumed grocery products to only those sizes specified by the authorities. It remains to be seen whether Western Australia will attempt to enforce standard size regulation in the face of open markets in the rest of Australia.

In contrast to these liberalising reforms, an imported food inspection regime has been introduced. From 1 July 1990 all food imports are subject to risk categorisation, sample selection and inspection for compliance with the health related requirements of the Australian Food Standards Code. This inspection, which is performed at the customs barrier by the Australian Quarantine and Inspection Service, is additional to both quarantine checks and the point-of-sale inspection undertaken by the States of domestically produced and imported foods.

Companies and securities regulation

New Commonwealth companies and securities legislation was presented to Parliament in 1988 in an attempt to establish a single, national regime for companies and securities control. The National Companies and Securities Commission has been replaced with a more independent Australian Securities Commission. The new legislation also repealed State and Territory legislation on the existing Cooperative Companies and Securities Scheme, primarily by utilising the Commonwealth's power over trading and financial corporations.

As well as unifying and simplifying companies and securities law Australia-wide, the proposed regime was designed to provide some deregulation of business activity: 'the opportunity has been taken to introduce a number of substantial reforms . . . of the excessive and unnecessary regulation imposed'. Otherwise, the 'essential language and concepts of the previous law remain' (Bowen 1988, p. 2994).

In February this year, the High Court ruled that the Commonwealth's attempt to gain exclusive control over the incorporation of all Australian companies under the legislation was beyond the power conferred by the Constitution. The Commonwealth's power to exercise jurisdiction over 'trading and financial corporations' once incorporated was not challenged. The Commonwealth has undertaken to re-frame the legislation in accordance with the High Court judgement and in cooperation with the States.

A proposal for regulatory reform

Australia's federal system of government has resulted in overlapping and/or different Commonwealth, State and Territory laws, regulations, policies and procedures relating to the production and distribution of goods and services.

The Commonwealth Government has recently identified the need for greater Commonwealth–State cooperation across a broad range of issues as a critical next step in the process of microeconomic reform (Hawke 1990a, b). The extent of the cooperation envisaged ranges from the further development of existing programs — such as the current efforts to unify regulations and licensing procedures in road transport — to a long-term aim of some redrafting of the Constitution to provide a more efficient federal system, particularly in the areas of revenue and spending.

The Government initiative proposes a consensus approach to such problems on the basis that much can be achieved before resort to constitutional amendment is required. Specific solutions have not been put forward, but clearly more uniformity in regulation is regarded as an important element. In fact, some of the problems cited could only be addressed by such an approach — for example, those in road and rail transport and secondary school assessment.

Prospects for unification

As acknowledged by the Prime Minister, efforts to unify different areas of regulation Australia-wide have been laborious and largely unproductive to date, despite the fact that the costs of inconsistent regulation are almost universally recognised. The limited successes — such as in food and packaging, the uniform Building Code of Australia, and the recent National Vehicle Standards Act — have been achieved only after very lengthy negotiations. Perhaps more importantly, these reforms have tended to increase, rather than reduce, the average level of State regulation, by either combining the regulatory regimes of several States or adopting provisions of the more heavily regulated States.

Although constitutional obstacles are often cited as the cause of inconsistent and overlapping regulation, they are simply the means by which the States and the Commonwealth exercise authority independently. There is no constitutional bar to Commonwealth–State agreements to enact uniform legislation — hence the Prime Minister's call for 'sensible, practical steps to get better co-operation within the framework of the Federal Constitution as it stands' (Hawke 1990c, p. 1).

The European experience

Europe has also been grappling with the issue of regulation rationalisation in the lead up to the implementation of a single product and service market in 1992. Original efforts to harmonise national regulations across the Community proved a very difficult and protracted process. Rather than continue these unproductive attempts, the European Commission has adopted selective harmonisation combined with the mutual recognition of each member State's standards in the remaining areas.

Mutual recognition of regulation in Australia

The European experience provides a useful pointer for Australia in its efforts to resolve the diversity of regulations between the States. By 1992 trade between member states of the European Community will be less restricted than between the States and Territories of Australia. In effect, individual European countries have decided that, notwithstanding history, the real differences between them are so small they can live with each other's regulations.

Advantages of mutual recognition

The homogeneity of Australian society suggests that a similar arrangement should be possible here.

Mutual recognition of regulations between all governments in Australia would have many advantages. For instance it would:

- acknowledge that unanimity of view across the detail of regulatory schemes is unachievable;
- avoid adopting rigid and prescriptive technical standards, thus removing a major impediment in markets subject to rapid technological change;
- expose governments to external pressures to regulate at minimum cost and maximum effectiveness, thus forcing a review of the essential role of government in particular markets;
- promote homogeneity of regulatory structures between States in the longer term because of competitive pressures, but with a lesser degree of regulation overall than would be achievable through negotiated uniformity; and
- reduce administrative costs.

If these advantages of mutual recognition are realised, both the breadth and pace of microeconomic reform programs will be enhanced.

Scope for mutual recognition

Mutual recognition of regulation could apply to regulations of all goods and services which are traded across State borders. It could also apply to professional and trade qualifications.

If a particular State or Territory standard for consumer information or safety was considered to be objectionable, a uniform Australia-wide standard could be negotiated to cover those specific matters. However, the success of a mutual recognition arrangement would depend on an understanding that single standards should be confined to essential matters.

There is considerable scope for the principles of mutual recognition of regulation to be applied in international trade negotiations, for example in further development of closer economic relations with New Zealand. A greater acceptance by Australian authorities of the standards of other countries would facilitate earlier access by consumers to a greater range of new products.

Limits of mutual recognition

There are some practical limits to applying the concept of mutual recognition.

Firstly, some areas are amenable to the concept of mutual recognition but a uniform standard would probably provide better results. For example, secondary school student assessment standards are currently subject to a form of mutual recognition. This is probably inferior to a standardisation approach.

Secondly, some areas of regulation could not be subject to mutual recognition. Australia's inconsistent road transport regulations and incompatible rail network are examples.

Finally, differing regulations covering the same subject in different regions may be superior because of the influence of geographic, climatic or demographic factors. For example, many environmental regulations need to vary between different locations to take account of such factors (see appendix 3 for a discussion of environmental regulation).

Appendix 7
Sectoral arrangements

Recent annual reports of the IAC reviewed a selection of sectoral assistance arrangements. These illustrate the extensiveness and complexity of assistance measures provided to Australian industry. Many of the complexities cannot be captured in the Commission's assistance measurement systems.

A common characteristic of sectoral arrangements is that their assistance implications are not readily apparent. This is especially so where regulations rather than market-based incentives are used to achieve government objectives. The firm-specific nature of some assistance arrangements and associated confidentiality considerations also compound transparency problems.

The Industry Commission is continuing to monitor recent changes and developments in industries covered by assistance packages and plans, drawing where possible on recent inquiry experience. Sectoral arrangements reported in this appendix are:

- coastal shipping and the waterfront;
- aviation;
- road transport;
- textiles, clothing and footwear;
- photographic colour film production;
- pharmaceutical products;
- customer premises telecommunications equipment; and
- the metals-based engineering program.

The list is not exhaustive of special arrangements for industry. For example, 'strategies' for the information industries, minerals processing, and forest products and printing are not included, although some of the relevant assistance measures are considered in appendix 8. The passenger motor vehicle plan is not included because the Commission is reviewing the plan in greater detail in its current inquiry.

A three-year program to reform Australia's shipping and waterfront industries was announced on 1 June 1989 (Willis 1989a). Details of the reform strategy and the background to them was provided in IAC (1989a, app 3). The program involves:

- reforming stevedoring practices on the waterfront;
- reforming port authority operations; and
- a recrewing package to raise productivity in coastal shipping.

To oversee the development and implementation of the reforms, the Government established the Shipping Industry Reform Authority (SIRA) and the Waterfront Industry Reform Authority (WIRA). The authorities will operate for three years.

Stevedoring industry reforms

A central element of stevedoring industry reforms is the 'in-principle agreement' — between the Commonwealth Government, the Australian Council of Trade Unions (ACTU), stevedoring unions and stevedoring employers — on measures to restructure stevedoring and international container depot operations. Released in September 1989, the agreement provides for:

- introducing enterprise employment arrangements at Sydney, Melbourne, Brisbane, Fremantle, Adelaide (and other ports as agreed), and container depots;
- a recruitment and early retirement/redundancy package to reduce the industry's work force by a net 2000 employees over a three-year period;
- extending the use of supplementary labour at peak times to all ports;
- award and job restructuring — the parties have agreed to the concept of a single stevedoring award and to rationalise union coverage at container depots;
- employment arrangements for the loading and discharge of bulk vessels to be in accordance with real operational requirements;
- removing the gangway watchmen classification from the industry and significantly rationalising shore-side security officer functions;
- government funding of $154 million on a dollar for dollar basis with industry for the early retirement/redundancy package, training and workplace restructuring; and
- a review of the agreement every six months (WIRA 1989).

Within the first six months of signing the agreement the parties were to:

- negotiate and conclude the draft Stevedoring Industry Award(s) 1989;
- determine industry and enterprise-based training arrangements to be offered to enable competency standards to be met;

- process offers for early retirement to enable surplus watchmen to leave the industry;
- complete the recruitment and training of 200 new employees to be employed within the terms of the agreement;
- have employers advise the authority of their plans to change to enterprise employment;
- enter into negotiation of enterprise or port agreements within the terms of the agreement; and
- revise manning levels for the loading of bulk grain (WIRA 1989, p. 4)

In April 1990 WIRA released its first six monthly report on the progress made in implementing reform within the agreed timetable (WIRA 1990). On release of the report, the Minister for Shipping said that while progress had been made 'there had clearly been difficulties with negotiations in some areas' (Collins 1990a). The draft stevedoring award was not completed until July 1990, three months after the deadline. Lack of progress in this area resulted in other reforms slipping behind schedule. For example, developing training arrangements depended on having new award classifications. The major changes in the industry since the signing of the agreement have been:

- 20 waterfront awards have been replaced with a single award (Collins and Willis 1990);
- the gangway nightwatchmen classification has been removed, with 277 watchmen leaving the industry at a cost to the Government of $8.14 million and with a similar cost to the industry — recurrent benefits were estimated at $30 million a year (WIRA 1990);
- labour practices at grain loading terminals are being overhauled — manning levels for grain loading operations will fall by between 50 per cent and 75 per cent and demarcation between terminal and shipboard employees will be removed (GCA 1990); and
- WIRA has held discussions with stevedores about their plans to introduce enterprise-based employment.

WIRA considered the first six months of negotiation provided 'a strong basis for the achievement of more widespread restructuring of the industry and substantial performance gains for the industry's users' (WIRA 1990, p. 7).

A Prices Surveillance Authority (PSA) inquiry into stevedoring and container depot charges was announced in May 1990. The inquiry 'is aimed at ensuring that the benefits from reforms are passed onto end users and consumers in general' and the PSA will report in November 1990 (Crean 1990a).

Port reform

The proposed reforms include:

- increased commercialisation of port authority operations;
- greater transparency in port pricing;
- more efficient management practices; and
- increased competition, particularly in the towage industry.

Because the States and Territories have responsibility for the port authorities, the Commonwealth needs their cooperation in implementing these reforms. In May 1990 the Australian Transport Advisory Council (ATAC) meeting decided that port reform would become a standing agenda item at ATAC meetings, requiring the States to report progress in this area.

A Commonwealth working party, which includes officers from the Trade Practices Commission and the PSA, will 'develop performance indicators to make the reports to ATAC meaningful and examine other issues associated with achieving more competitive commercial environments in the ports' (Collins 1990c). WIRA also collects port performance statistics as part of its monitoring role in waterfront reform. However, only Adelaide had supplied data in a form that could be published in WIRA's first report. Details on State and Territory changes to port administration and pricing are provided in appendix 5.

In December 1989 the Chairman of SIRA was given responsibility for overseeing the Government's towage industry reform strategy. Major elements of the strategy include manning reductions (of both harbour and outside tugboats), a review of port practices, and training, early retirement and redundancy schemes. Crews on tugs are to be reduced to a maximum of four by July 1992. The first phase of recrewing — reducing crews on harbour tugs to a maximum of five — has been completed. Port practices are under review with agreement on removing 41 jobs and implementing more flexible rostering and leave arrangements. To June 1990, the Commonwealth had provided $2.2 million for 90 voluntary early retirement packages (SIRA 1990, pp. 7–9).

Coastal shipping

The main features of the reform program for coastal shipping are:

- reductions in the average size of crews on major trading ships from 29 in 1989 to 21 by July 1992;[1]
- government funding for early retirement schemes ($24 million towards the estimated $80 million needed for the 1000 jobs which may be lost) and for retraining seafarers (half the cost to a total of $5 million over three years);
- assistance for new ships and for modifying existing ships for operation with smaller crews; and
- retention of the cabotage policy whereby coastal shipping must be licensed and, whenever possible, coastal trade carried in Australian controlled and crewed ships.

According to SIRA's June 1990 report, shipping reform was proceeding ahead of schedule. The recrewing of ratings' berths on pre-Crawford ships was completed in January 1990, reducing the number of berths on the 36 pre-Crawford ships in the program by 12 per cent (132 ratings' berths, equivalent to 290 jobs). Other berths are being removed so there will be a total reduction of 18 per cent (SIRA 1990, PSA 1990a). The reduction of ratings' berths on 13 Crawford ships to MIDC levels by March 1991 will remove 40 berths (or 80 jobs).

While maintaining its cabotage policy, the Government decided to facilitate greater use of the single voyage permit (SVP) and continuous voyage permit (CVP) systems which allow foreign vessels to trade on the Australian coast. The new guidelines for these systems announced in February 1990 are designed 'to provide shippers with greater flexibility in the use of foreign vessels in Australia's coastal trade' (Willis 1990a). A single voyage or continuous permit may be issued for the use of a non-licensed ship in the coastal trade where:

- no licensed ship is available for the service; or
- the service carried out by a licensed ship or ships is inadequate to meet the needs of a port or ports; *and*
- it is desirable in the public interest that unlicensed ships be allowed to engage in that trade.

A ship may be considered unavailable if it cannot meet the 'reasonable' needs of a shipper or is engaged on other trades. A ship is considered inadequate when it is 'not suitable' for the task in terms of its technical characteristics, capacity to

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1 Australia's coastal trading vessels are categorised according to previous reform efforts. Pre-Crawford vessels are those which operated before the Crawford Committee reforms of 1984. Maritime Industry Development Committee (MIDC) reforms commenced in June 1987. Pre-Crawford ships are to be recrewed to Crawford levels (crews of about 26 to 29), Crawford ships to MIDC levels (crews of about 21 to 23), and new ships introduced into the fleet by mid-1992 with as low as 17 or 18 crew.

transport cargo safely and ability to meet the delivery requirements (as to time and cargo condition) of the shipper. When licensed ships are unavailable or unsuitable, the public interest is assessed 'on the merits of the case' of each permit application.

The SVP system is designed for use when there is a one-off unavailability of suitable licensed ships. On receipt of an SVP application, the Department of Transport and Communications provides details to relevant ship operators, the Australian National Maritime Association and the Federation of National Maritime Unions for comment normally within two working days. The power to issue SVPs has been delegated to senior departmental officers.

The CVP system is designed for use when there is a lack of suitable licensed ships for extended periods. Permits may be issued for six months. Subject to meeting the designated tests, CVPs may be reissued but the period of continuous trading cannot exceed three years. On receipt of an application, the department canvasses the views of shippers and unions before putting it before the Minister for determination. A CVP may be issued when the Minister is satisfied that:

> 'it is clearly in the national interest; and
>
> it is in the longer term interests of the Australian shipping industry because the issue of the continuing permit will maintain and stimulate coastal seaborne trade and hence create opportunities for the future use of efficient licensed tonnage' (Willis 1990a, Attachment p. 2).

Since the new guidelines were released, 73 SVPs have been issued but as yet no vessels are operating on a CVP.

The PSA has a monitoring role over freight costs. In March 1990 it released a report on how it proposes to monitor coastal shipping freight rates and the performance of the industry (PSA 1990a).

Assessment of waterfront and coastal shipping reform

The authorities overseeing waterfront and coastal shipping reform, WIRA and SIRA, appear satisfied with progress in the industries at this stage. However, both these plans represent negotiated settlements to the problems within the industries, with significant financial support from the Commonwealth. The pace of change has been set independently of what takes place in the rest of the economy or the rest of the world. It is unlikely that restructuring that is isolated from competitive pressures will yield productivity gains as great as those achievable through exposure of the industries to competition.

Notwithstanding the gains made in reducing manning levels, the nature and pace of change may not be adequate to address inefficiencies in Australia's coastal shipping. While the reforms intend to achieve an average crew size of 21 on Australian ships by mid-1992, OECD shipping nations were operating with average crewing levels of 18 in 1985 (IAC 1988b, p. 56). Moreover, most OECD countries operate with lower crew to berth ratios than Australia. Crew to berth issues on Australian ships have yet to be fully investigated (SIRA 1990, p. 5). The single and continuous voyage permit systems can increase the availability of shipping services to users. However, the scope for effective competition is difficult to determine given the conditions which apply and absence of price considerations as a criterion for the availability of permits.

On the waterfront, negotiations have led to significant cost savings in some areas (for example, in the loading of bulk grain). But there has been little progress on a range of other issues. In some areas negotiations have fallen well behind the agreed timetable. The Government estimated it would outlay $37 million as part of the redundancy package in 1989–90 but, reflecting a slower pace of change than expected, only $8.1 million was expended (DoTC 1990, p. 338).

Aviation

Australia's international and domestic airline services are provided within a highly regulated framework. Australia's international aviation services are regulated through a series of bilateral air services agreements. Domestic air services have been dominated largely by the two-airlines policy which formally ends in October 1990. Regulation of Australian aviation services has limited competition, raised fares and reduced the services offered to travellers. The Government also plays a direct role in the aviation industry through its ownership of Qantas and Australian Airlines. These issues were central to the IAC's inquiry on travel and tourism (IAC 1989b).

International aviation

Air service agreements permit each country to designate one or more airlines to fly specified international routes between the two countries. Australia has designated Qantas as its sole international carrier. The agreements provide benefits to national carriers by restricting competition in three ways:

- they limit the number of airlines that can fly between each country, barring airlines that might otherwise serve these air routes;
- they limit the total capacity provided on each route, that is, the number of flights or number of seats which can be made available; and
- they divide the entitlements to provide that capacity between the airlines of the countries that are parties to the agreement, usually on a 50–50 basis.[2]

The IAC found that regulatory arrangements were preventing some relatively lower cost carriers from serving routes to and from Australia. Air fare comparisons, evidence from the sale of entitlements, the results of published research on cost differences and its own analysis led the IAC to conclude that international air fares could be 20 per cent lower in the absence of restrictions.

2 For further elaboration on the economic effects of air service agreements see IAC (1989b, chap 4).

Air service agreements have a number of implications for the national economy. Qantas gains to the extent that the agreements confer market power on it and enable it to earn higher profits. However, higher fares and restrictions mean that fewer international visitors are coming to Australia and those who do come have less to spend while they are here.

Analysis undertaken by the IAC indicated that the benefits the air service agreements provide Qantas are offset by costs imposed on Australian industries. Even under the extreme assumption that Qantas would lose all of its market and would be unable to respond to increased competition by improving productivity, the economy-wide benefits of lower airfares in a less restrictive environment were found to more than offset Qantas' losses — there would be a small positive gain to GDP. If Qantas maintained its market share by improving productivity or differentiating its product, the gains to GDP would be about $670 million a year.

Furthermore, the higher fares Australians face reduces their welfare by reducing their purchasing power over other goods and services. The IAC's analysis suggested that higher international air fares reduce the spending power of Australians by $225 million a year.

A new approach to negotiating air service agreements was announced on 15 June 1989 (Willis 1989b). The Government acknowledged that the interests of Qantas had previously dominated negotiations on amending existing or entering into new agreements. The new policy objective is to maximise Australia's national interests, primarily by taking account of a wider range of industry views, particularly those of tourism. The consistency of Australia's international passenger charter policy is also being assessed against this new objective.

Domestic aviation

In October 1987 the Government announced that the two-airlines policy — and the controls it entails over route entry, capacity, aircraft size and fleet, and fares on interstate routes — would end in October 1990. The announced changes will remove many of the regulations which have restricted real competition between the major domestic airlines, Ansett and Australian Airlines. Significantly, existing domestic carriers will be able to compete on the basis of price.

A critical issue for domestic aviation policy is access to terminal facilities for new carriers. The Federal Airports Corporation (FAC) is now responsible for providing access to terminal facilities for new entrants. But before its inception, Ansett and Australian Airlines had been granted what are effectively 30 year leases over domestic terminals at all major airports. The leases to the incumbent domestic airlines require a certain number of gates at each terminal to be sub-let to new entrants after deregulation in October. However, the sub-leases are hardly favourable to new entrants.

In May 1990 the Government announced priorities for access by new airlines to terminal facilities on long-term lease to Ansett and Australian Airlines. The next step was for negotiations between Ansett, Australian and intending new entrants on the commercial arrangements which would apply. The FAC will provide accommodation for new operators in existing facilities at Brisbane and Hobart and it

> 'will be open to the FAC to make provision at its airports for the construction of alternative facilities — which could range from low cost, no frills facilities to high standard facilities — as a means of providing further scope for competition from new entrants' (Collins 1990b).

With the exception of Victoria and South Australia where there is virtually free competition, the States are generally involved in economic regulation of intrastate air passenger services, determining where, how often and how many services operate.

Assessment

The issue for international aviation policy is to examine the alternatives available to reduce or eliminate the anti-competitive elements of air service agreements which are contributing to the high costs of international travel. Qantas' interests are to have a less dominant role in negotiating agreements but it is difficult to assess the extent to which the new approach is overcoming barriers to competition.

The policy changes for domestic aviation which take effect from November 1990 are a move towards greater competition. While most controls on entry, capacity and fares will be removed on interstate routes, the effects of deregulation on fares and services will depend on the significance of the remaining restrictions:

- Until new entrants begin operation it is difficult to assess whether the lease arrangements for terminal facilities will satisfactorily meet their demands. Inadequate access may undermine effective competition in domestic aviation and put new entrants at a disadvantage compared with established players.

- The markets for domestic and international air services remain separated — Qantas and foreign international airlines are precluded from carrying domestic passengers within Australia. The continued separation of the domestic and international markets prevents airlines from taking advantage of the economies available from supplying both markets.

- Special foreign investment rules restrict the ownership of Australian carriers by any foreign airline flying to Australia to less than 15 per cent of equity in any one domestic operator. Investment by other foreign interests will be considered under the general foreign investment guidelines.

- Government ownership of Qantas and Australian Airlines constrains their operations.

There are clear gains to be made from removing the anti-competitive elements in the regulations under which Australia's international and domestic airline services are provided. In its report on travel and tourism, the IAC proposed a four phase reform strategy to maximise efficiency in the provision of air services and ensure that the gains would be passed on to travellers.

Transport costs are an important determinant of the competitiveness of Australian industry. Road transport dominates the transport industry in terms of value of freight and it provides a major input into other industries. Road transport costs represent almost half of the total transport costs of other industries and nearly 2 per cent of total production costs for all industries. While road transport is not subject to an assistance plan as such, government involvement in the provision of roads affects the costs and economic performance of the industry. The most important issue which bears upon the structure and competitiveness of Australian road transport industry is road pricing.

Since 1982 Commonwealth funding for roads has been based on hypothecating (or earmarking) part of the excise levied on petrol and diesel to funding road construction and maintenance. The amount hypothecated to road funding represents approximately one quarter of the revenue received from fuel taxes and one third of the expenditure by all levels of government on national, state arterial and local roads. State and Territory expenditures have been funded through a variety of imposts including vehicle registration charges, fuel business franchise fees, stamp duties and other means including tolls. In some jurisdictions, revenue from fuel franchise fees and vehicle registration charges is hypothecated to road expenditure. Considerable variation exists between the States and Territories in the level of such charges and the basis on which they are levied.

These arrangements raise a number of reform issues:

- road use pricing has not reflected costs so that authorities do not have the appropriate demand signals on which to base efficient investment decisions;
- road authorities are not directly accountable to road users, the consumers of their services; and
- the activities and performance of road authorities are not transparent under the current funding arrangements.

In the past, these issues were not seen as having the same significance as in other areas of transport because the total contribution by road users exceeds costs and because of the perception that road transport is more efficient than rail, its main competitor. Government policy also implied that reform of road pricing and road authorities could not proceed until reforms in the rail industry brought about an efficiency performance similar to that achieved by road transport.

Nevertheless, the variations in road user charges and mass and dimension restrictions, together with the fact that road vehicles used exclusively for interstate trade paid only nominal registration charges, lead to a national focus on road pricing issues.

Numerous investigations of road financing and pricing have been conducted over the last decade, culminating in the proposals by the Inter-State Commission for a national scheme for road use charges and vehicle registration (ISC 1990).

The main components of the scheme proposed by the ISC were:

- a nationally determined system of efficient and equitable road use charges for all vehicles, comprising a fuel charge (made up of a road track charge and an externality charge) and, in the case of heavy vehicles, a mass-distance charge;
- an independent national body to supervise the operation of the scheme and to recommend the level of charges and the allocation to the States, Territories and Local Government of revenues from those charges;
- transparency in road authority programs and operations, with some assessment by the Commission's proposed independent body of road authority performance;
- public participation in the formulation of road programs and in determining the level of charges;
- a national vehicle register formed by standardising and interconnecting the individual State and Territory registers; and
- designated routes for vehicles exceeding normal mass limits.

Following the tabling of the ISC's report, a review of the recommendations was undertaken involving consultations with governments, road user groups, and the public. A number of further recommendations on the implementation and transitional arrangements were made in the light of the consultations and the comments received.

The recommended national scheme, if adopted, will represent a significant advance in Commonwealth–State cooperation in reform. The direct benefits to the community once the scheme is fully implemented would be lower transport costs, resulting from the following factors:

- the reduced need for road expenditure because of reduced road wear and tear per unit of freight carried;
- reduced transport costs through greater efficiency in roads expenditure resulting from
  - available funds being spent on more worthwhile projects as a result of public participation and greater emphasis on economic factors in allocation of funds, and
  - available funds being used more efficiently through better planning, construction and maintenance procedures as a result of independent review of projects;
- savings in administration costs;
- savings in costs resulting from more effective means of dealing with the problem of vehicle theft; and
- in the longer term, better locational decisions by business.

In the longer term, transport costs would diminish because the vehicles would be selected to reduce charges, which in turn means vehicles would be selected that reduce road wear and tear and reduce the need for road funding. In some cases there would be an increase in private costs but this will be more than compensated by the decrease in the cost of road services. The charges would have the impact of optimising the productivity of the total private and public capital investment in vehicles, roads and production facilities.

The IAC estimated the gains resulting from reform of road pricing would be of the order of $1.2 billion a year (IAC 1989a, app 2).

As a result of the ISC's recommendation in its 1988 report on road vehicle regulation, vehicle standards at first registration are now regulated on a national basis by the Commonwealth in consultation with the States, Territories and vehicle manufacturers (ISC 1988). However, with the exception of a small number of vehicles registered under the Federal Interstate Registration Scheme, the States and Territories regulate vehicle use. This regulation is mainly aimed at ensuring safe and effective road use, although some economic regulation of bus and rail-competitive freight operations still exists.

The most significant of the road use regulations are those relating to driving hours, vehicle speed, and mass and dimension limits — areas in which the States and Territories have not been able to satisfy road user demands for nationally consistent standards. The introduction of a system of national routes, where uniform road use regulations apply under the recommended national scheme, will reduce the impact of different regulatory requirements in some jurisdictions. In addition, it will be possible to increase mass limits and introduce B-double combination vehicles on these routes earlier than would be the case if all roads had to be considered. This development would considerably improve road transport productivity and net transport cost savings after taking into account the increased road wear and tear and construction costs.

The textiles, clothing and footwear (TCF) plan began full operation on 1 March 1989 and is scheduled to run until June 1995. The plan will lower border assistance by removing tariff quotas, through the phased lowering of out-of-quota duties, to provide tariff-only protection against imports from July 1995. At that time, the remaining tariff protection — 55 per cent for apparel and some finished textiles, and 45 per cent for footwear, with lower duties for other TCF products — will be the highest provided any manufactured goods. At those high levels, TCF tariff protection compares unfavourably with what will be provided in 1992 to passenger motor vehicles (35 per cent) and with the maximum tariff of 15 per cent that will apply more generally.

The plan will also reduce the rates of the bounties paid for the production of certain goods (mainly textile yarns). In addition, the plan contains a number of schemes to target assistance to specific activities and to ease industry adjustment.

The Textiles, Clothing and Footwear Development Authority (TCFDA) was established in 1988 to administer and monitor the operation of the plan. A special feature of the plan is a safeguard mechanism whereby the TCFDA can suspend assistance reductions for up to 12 months if industry production has declined, or is likely to decline, below certain threshold values. In 1989–90 the decline in footwear production came close to the threshold specified for that activity.

The TCFDA is also actively involved in industry development programs and in labour adjustment assistance. A focus for the development of the industries is the industry development strategy comprising four programs — raw materials processing, industries efficiency, industries infrastructure and export development — involving feasibility and marketing studies, individual and cooperative projects, and specific schemes such as the textiles industry modernisation scheme, the incentives for international competitiveness scheme, and the management and business skills scheme.

Commonwealth expenditure under the schemes totalled $5.4 million in 1989–90 and a budget of $9.9 million is provided for 1990–91.

Review of textile yarn bounty administration

In response to a Ministerial request, the TCFDA was to review the textile yarn bounty administration by 30 September 1989. In September 1989 it released a discussion paper setting out perceived weaknesses in the yarn bounty administration and options for change (TCFDA 1989). The discussion paper was circulated to industry for comment and, after consultations, a final report was to be presented to the Minister. As at 20 September 1990, the final report had not been formally presented.

Textile bounty capitalisation grants scheme

On 30 January 1990 the Government announced details of the textile bounty capitalisation grants scheme that it had foreshadowed when it introduced the current plan. Under the scheme, a once-off capitalisation grant is paid in lieu of future bounty receipts. The maximum grant is to be less than the net present value of expected future bounty payments. The aim of the scheme is to provide an opportunity for accelerated restructuring while at the same time generating net reductions in budgetary outlays by the Commonwealth (Beddall 1990b). Capitalisation is not an option under any other bounty.

To date one firm, Dupont (Australia) Ltd, has opted to capitalise the bounty. Dupont acquired Fibremakers' Bayswater operations for $100 million and plans to invest $50 million in new technology, skills and product improvement over the next three years. Under the bounty capitalisation scheme, the company will receive a grant of $59.3 million in 1989–90, but will be ineligible for further bounty payments over the life of the plan (DITAC 1990, p. 42).

Assessment

The current TCF plan provides for significant reductions in assistance. In 1987–88, the last full year before the introduction of the current plan, the effective rate of assistance to textile production averaged 73 per cent and for clothing and footwear 174 per cent (see appendix 11). The phasing out of quota protection and reductions in bounty assistance over the life of the plan are projected to lower textile assistance by one-eighth to 64 per cent and clothing and footwear assistance by one-third to 113 per cent. Nevertheless, at those levels they will be some 5 times and 9 times higher respectively than the average level of assistance provided manufacturing in 1992.

In 1989–90, the first full year of operation of the current plan, assistance levels were higher than in 1987–88 reflecting the overall increase in tender sale premiums that occurred for 1989 and 1990 quota (see appendix 11). The provisional quota premiums for 1991 (at 17 per cent) were just under half those for 1990 at (about 37 per cent) (Beddall 1990c). This reduction reflects the downturn in domestic demand rather than any major effects yet from the phased reductions in out-of-quota duties.

Photographic colour film production

On 31 October 1989 the Commonwealth Government announced its intention to introduce a bounty for the production of photographic colour film. No public review was conducted before the decision was announced. The bounty is only available to those producers who are registered for the entire five year bounty period, which commenced on 1 January 1990. This condition limits the receipt of the bounty to Kodak Australasia. Whilst taking the form of a specific bounty of $3.75 per square metre of eligible film, the bounty is only payable when all eligibility conditions have been met throughout the entire five-year bounty period — otherwise any advances made may be reclaimed by the Government.

These conditions require Kodak to: maintain its export commitments for five years; implement significant productivity improvements through award restructuring, inventory, overheads and production line improvements; and maintain prescribed production, and employment levels (Button 1989b). Details of more specific conditions in the Photographic Industry Development Agreement have not been made public by the Government.[3]

The bounty payments have a ceiling of $36 million over the life of the agreement, and only the first three years are to receive an appropriation (Brown 1989b).

The Victorian Government has also announced a package of assistance for Kodak. The Minister for Industry, Technology and Resources stated that the:

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3 Some details were released by Kodak Australasia at the Industry Commission public hearings into the commercial tariff concession and by-law systems, Melbourne, 27 June 1990, Transcript p. 658.

'assistance package is likely to be in the order of a total of $6 million over three years and would include money for training incentives, research and development expenditure related to exports, and assistance with export development activity in Asia . . . This assistance would be conditional in the company making certain guarantees in regard to growth in its export and investment activities significantly beyond the current levels' (White 1989, p. 441).

The provision of the bounty to Kodak has significantly raised assistance to the industry class of which colour film production forms a part — even though only six months of bounty payments have been included in the estimates. The effective rate of assistance increased from 4.3 per cent to 11.5 percent largely because of the bounty (appendix 11). As the bounty payment is specific to Kodak, the increase in the rates of assistance to that company's activity are much higher.

Pharmaceuticals industry

The Pharmaceutical Products Benefits Scheme (PBS) assists Australian consumers in their purchase of pharmaceutical products. Prices for drugs supplied under the PBS are negotiated between the Pharmaceutical Benefits Pricing Authority (PBPA) and suppliers. Concern has been expressed by local producers that negotiated prices, which are low in comparison with other developed countries, have discouraged local pharmaceutical production activity, investment and R&D.

In response to these concerns the Government in 1987 introduced the pharmaceutical industry development program — also known as the factor f scheme — to encourage local activity. Participating firms receive increased prices if they undertake to meet either quantitative targets for R&D and export activity or satisfy the PBPA that they are substantially increasing activity in this country and the activity concerned is internationally competitive. The scheme operates until 1992–93.

The Australian Pharmaceutical Manufacturers Association surveyed 15 firms in the local industry (Thwaites 1989). As at December 1989, five had negotiated factor f agreements with the PBPA. According to the data presented by the companies, estimated payments by the Government (in higher prices) over the life of the scheme amounted to $127.4 million. Actual payments will depend on companies fulfilling their commitments. Table A7.1 presents an aggregate summary of commitments made by the five firms. These commitments are in addition to any existing export and R&D activity. Additional export revenue of $877.6 million and $68.2 million in additional research and development were attributed to the scheme. The APMA study reported that other firms had either concluded negotiations with the PBPA or were submitting proposals.

Table A7.1
Factor f scheme activity: projections by five companies
$ million

	1988–89	*1989–90*	*1990–91*	*1991–92*	*1992–93*
Factor f payments	6.7	12.8	23.7	37.7	46.6
Additional exports	87.5	119.6	169.6	234.9	266.4
Additional R&D	11.2	15.6	18.6	13.8	9.0

Source: Thwaites (1989).

Assessment

The motivation for the pharmaceutical industry plan is different from that of other industry arrangements. The factor f scheme needs to be assessed in the context of the purchasing arrangements for pharmaceuticals in Australia. Through exercising its market power as the major buyer of pharmaceuticals, the Government extracts some of the returns that the patent system would otherwise provide for international pharmaceutical companies. Because Australia is a relatively small market, there is no effect on product innovation by the major world producers but a significant budgetary saving for Australian governments.

However, this arrangement may adversely affect Australian industry if the location of production facilities is influenced by pharmaceutical prices in each country. Australia's pricing practices may have created a bias against investment or undertaking local research and development. A program that offset such a bias could be seen as enhancing efficiency rather than providing assistance.

This is the motivation for the factor f scheme: to return some of the savings negotiated in lower prices to companies willing to undertake local production and activities. However, the lack of transparency in the scheme — all agreements are confidential and the guidelines governing its operation appear flexible — makes it difficult to assess whether the scheme is enhancing efficiency or affording assistance on a selective basis. The scheme is to be reviewed in 1993.

[illegible] telecommunications equipment

For many years the connection of customer premises telecommunications equipment (CPE) to the public telecommunications network was governed by a complicated set of industry assistance and regulatory arrangements. From 1 July 1993, the only form of protection for suppliers of CPE will be a tariff of 15 per cent on imported equipment. To effect a transition from a highly regulated environment, new industry development arrangements were introduced in July 1989.

Suppliers of CPE equipment are awarded points depending on the their level of local content, R&D and exporting activity. Equipment manufacturers must achieve a certain threshold level of points annually to retain access to the Australian market. The number of points needed to retain endorsement progressively increases over the life of the arrangements. Failure to meet the required threshold points means that a supplier has its endorsement cancelled and it is ineligible to re-apply for at least a year.

Five types of telecommunications equipment are covered by the scheme: the first telephone; private automatic branch exchanges; small business systems/key systems; and cellular mobile telephones.[4] Austel assumed responsibility for administering the scheme in December 1989, but the Department of Industry, Technology and Commerce (DITAC) retains responsibility for determining policy matters.

In May 1990 Austel released a report detailing the first nine months of operation of the industry development arrangements (Austel 1990b). The 31 companies endorsed under the arrangements collectively exported 7.6 per cent of turnover and invested 3.9 per cent of turnover on R&D. According to Austel the 'performance of suppliers for the first 9 months of the Arrangements has been somewhat varied' (p. 6). Eighteen companies were either meeting, or close to meeting, the points requirement while the remaining companies had plans to increase their activities by sufficient value to gain the points necessary to retain endorsement.

Assessment

Although the scheme has allowed new suppliers entry to supplying the Australian telecommunications network, competition is restricted to those meeting the complex criteria. The scheme also lacks transparency — it is difficult to gauge the levels of assistance provided to endorsed suppliers and to their various activities. However, as the arrangements are transitory, they are unlikely to distort greatly the longer term incentives facing the telecommunications equipment industry.

Nevertheless, the arrangements involve extensive monitoring and compliance activities. For example, endorsed suppliers have to submit reports on either a monthly or quarterly basis (depending on the year in which they entered the arrangements) and are subjected to an independent annual audit. Austel and DITAC must be satisfied that new entrants are capable of meeting the points threshold before endorsement is granted and monitoring and reporting on the industry is extensive. If it was considered the industry needed time to adjust to a more liberal regulatory regime, this may have been achieved in a simpler, more transparent fashion by introducing a tariff and phasing it to 15 per cent over the period to July 1993.

4 For details of the weighting attached to R&D, exports and local content across CPE products see IAC (1989a, app 3).

The metals-based engineering program

The four year metals-based engineering program (MBEP) began operation in August 1989. It aims to encourage the metals engineering sector to become internationally competitive in elaborately transformed manufactures and to improve its export performance. There are two major elements to the program: an export improvement element and a key technologies element. The export improvement element, which receives the bulk of funds, is delivered through Austrade and NIES.[5]

In 1989–90 expenditure on the program was $2.2 million. This is estimated to rise to $5.4 million in 1990–91 (DITAC 1990, p. 27). Over the last year Austrade provided assistance to engineering industry export groups and selected companies. Activity under the key technology element of the program concentrated on advanced manufacturing technologies and the commencement of a component commonisation program for agricultural machinery' (p. 54).

DITAC have stated that the MBEP 'will be assessed against increases in export activity, evidence that an export culture is developing, increased participation in NIES and Austrade programs and additional market activity' (p. 54). After one year of operation it is too early to make an assessment of the program.

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5 See IAC (1989a, app 3) for more details on the operation of the program. Details on NIES are provided in the next appendix.

Appendix 8
Alternative assistance measures

This appendix examines a range of alternative assistance measures that selectively support particular activities and attempt to influence the direction of their development. The measures considered are:

- the offsets program, including the partnerships for development scheme;
- government purchasing;
- defence procurement;
- export assistance;
- the national industry extension service;
- research and development (R&D) assistance; and
- Australia's foreign aid programs.

The assistance provided by these measures is rarely transparent, making it difficult to identify both the extent of assistance provided and its effects.

Governments also use other measures to assist Australian production. For example, in exercising discretion in granting by-laws for duty free import to the North West Shelf gas project, the Commonwealth made otherwise internationally uncompetitive Australian tenders more attractive in the construction of the Goodwyn A platform. There is a contradiction between the desire to make Australian industry internationally competitive and impairing its competitive edge by requiring higher levels of local content than are commercially viable.

Australian civil offsets program

The Australian Civil Offsets Program has been operating in various forms since 1970. The Commonwealth, all States and the Northern Territory now participate.[1] No major changes have been made to the program in the past year. Under the program, overseas suppliers awarded major government contracts for goods and services are required to undertake specified activities in Australia.[2] The Department of Industry, Technology and Commerce recently stated that:

> 'The concept underlying the Offsets Program is to utilise economically and efficiently the buying power available to the Government as a major purchaser

1 Discussions are currently underway regarding membership of the Australian Capital Territory.

2 In general terms, offsets activities are required in respect of all government purchases which, individually or cumulatively, exceed $2.5 million and the imported content exceeds 30 per cent. Some States use a $1 million imported content threshold.

of, mainly imported, capital items such as aerospace and computer equipment to gain access to the internal markets and marketing facilities of the large world corporations which dominate these products and leading edge technologies which otherwise would be closed to Australian companies' (DITAC 1989a, p. 1).

DITAC also stated that:

> 'The Offsets Program seeks to reach its objectives of improving the international competitiveness of Australian industry and building up its technological capabilities in a non-directive fashion' (p. 2).

Eligible offsets activities include the transfer of technology, research and development, training and exports. However, greater weight is given to some activities — for example, the offsets value of R&D and training is three times that of other eligible activities.[3]

Achievements under the program

At 30 June 1989 total offsets obligations incurred since the commencement of the program were estimated at $1.94 billion and offsets achievements at $1.99 billion.[4]

There were 112 companies participating in the program at 30 June 1989. During 1987–88 and 1988–89 the aerospace industry and the information technology industry accounted for over 90 per cent of purchases giving rise to obligations (table A8.1). The pattern of obligations arising from the program reflects the nature of purchases.

Offsets achievements were concentrated in the export of products and services and R&D areas (table A8.2). Although offset discharges have been concentrated in these areas, suppliers can discharge their obligations in any area specified under the program criteria (DITAC 1988, sections 3 and 4). This gives suppliers some flexibility in fulfilling their offsets obligations.

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3 For details see DITAC (1988, section 4).

4 DITAC (1989a, p. 15). These figures exclude some $250 million of future obligations and include $320 million of achievements in anticipation of future obligations.

Table A8.1
Procurement and offsets obligations incurred by industry[a]

Industry	Procurement				Obligations incurred[b]			
	1987–88		*1988–89*		*1987–88*		*1988–89*	
	$m	*%*	*$m*	*%*	*$m*	*%*	*$m*	*%*
Aerospace	131	29	1025	60	36	38	226	67
Information technology	288	64	602	36	48	51	96	28
Other[c]	30	7	70	4	10	11	16	5
Total	**449**		**1697**		**94**		**338**	

a Excludes purchases and obligations under partnerships for development agreements.

b The offsets obligation arising from procurement is generally 30 per cent of the imported content. The value of obligations incurred is thus generally less than 30 per cent of the procurement value.

c Includes procurement from industries producing civil vehicles and associated equipment, miscellaneous electrical and electronic equipment and miscellaneous mechanical equipment.

Source: DITAC (1989a).

Table A8.2
Offsets achievements by type of activity[a]

Offsets activity	*1987–88*		*1988–89*	
	$m	*%*	*$m*	*%*
Exports of products/services	281	72	237	66
R & D	55	14	76	21
Transfer of technology	25	6	19	5
Joint or collaborative ventures	19	5	8	2
Training	4	1	8	2
Administrative expenses	4	1	5	2
Overseas marketing	1	–	4	1
Insurance	–	–	4	1
Part production	2	1	–	–
Total	**389**		**361**	

a Excludes purchases and obligations under partnerships for development agreements.

Source: DITAC (1989a).

Partnerships for development program

Partnerships for development agreements are a mechanism by which companies in the information industry can choose to become exempt from offsets obligations. Multinational companies entering partnership agreements are required to increase industrial R&D to 5 per cent of total sales turnover in Australia and achieve a 50 per cent export to import ratio within seven years. In return, the Commonwealth and State Governments exempt companies from civil offsets obligations and are to provide a 'supportive infrastructure environment' by ensuring adequate availability of skilled labour and by using existing general assistance programs to help in product development and export activities.

The program continues to grow, with an additional six firms signing agreements since the IAC's last annual report, bringing the number of firms in the program to 21.

Reviews of the partners' achievements

The program provides for an annual review and audit of the partners' achievements. These provisions make the achievements of the program more transparent and are intended to minimise the scope for abuse, creative accounting and other activities contrary to the spirit of the program (Button 1988, p. 770). DITAC has released some details of the interim performance of nine of the partners after the first full year of the program. [5]

The information is aggregated and it is not possible to establish how individual firms have performed . In aggregate, the firms exceeded their combined first year export targets by 4 per cent and their R&D targets by 36 per cent. Although details were not provided, some firms did not achieve nominated targets for R&D and/or exports. Despite this DITAC considers that the partners 'are taking their obligations seriously and are investing the time and resources required to meet their commitments' (DITAC 1989a, p. 43). These interim targets are not binding on the firms.

Joint Committee of Public Accounts report

Numerous reviews of the offsets program have been undertaken since it commenced in 1970.[6] In the most recent review, the Joint Committee of Public Accounts reported on hearings it held in April 1989 on departmental responses to the previous committee review of the offsets program (JCPA, 1987). The responses to that review were 'a source of considerable disappointment' (JCPA 1990, p. v). The Committee considered that the Finance Minute, which coordinates departmental responses to Committee reports:

> 'did not provide persuasive evidence which sufficiently justified the rejection by the departments involved of certain recommendations. The Committee was

5 DITAC (1989a, pp. 42–5). The partners reviewed were Digital Equipment Corporation, Hewlett-Packard, Wang, Cincom Systems, Bull HN, Apollo Domain, Apple, IBM and Unisys.

6 See IAC (1986, pp. 36–8; 1987b, pp. 77–84; 1988c, pp. 65–73; and 1989a, pp. 65–71).

also disturbed to find that despite three reviews to date — the Auditor-General's Efficiency Audit on the Administration of the Offsets Policy in 1984, the Inglis Review also in 1984 and the Committee's own review — some aspects of the program appeared to be still open to the same sorts of criticisms previously directed at it. The administration of the Offsets Program continues to be the subject of questions and unfavourable comment by other parliamentary committees and Parliament itself, and on occasions the Program suffers criticism from sections of industry and the media' (pp. 10–11).

The Committee commented that costs associated with the program had been widely discussed and include:

- increases in the purchase price of overseas goods;[7]
- hidden costs to the taxpayer for support of R&D and bounty payments;
- hidden costs to the economy in support of activities which may not be competitive in the long run;
- weakening the government's claim against other countries' countertrade policies prejudicial to Australian exports;
- distorting resource allocation by encouraging the expansion of inefficient firms at the expense of other firms.
- a reduction in the number of potential suppliers as a result of the need to meet offsets requirements;
- direct and indirect administrative costs of arranging, assessing and overseeing the program; and
- direct administrative costs to the overseas supplier in complying with the arrangements;

The Committee considered 'the perceived benefits of the policy, such as increased access to international markets and technologies are extremely difficult to assess and not readily quantifiable' (JCPA 1990, p. 91).

The Committee made numerous detailed recommendations covering many aspects of the program. The recommendations aim to:

> 'ensure consistency and equity in the application of the offsets policy amongst both overseas and local participants, to minimise the degree of administrative discretion utilised in assessing and evaluating offsets proposals, and of particular import, to remove the shroud of secrecy for which the program has been widely criticised, by seeking to improve program visibility and accountability' (p. vi).

The Committee recommended 'an independent full scale assessment be undertaken of the national significance of the offsets policy, in particular to identify and quantify all policy implementation costs, and assess the success or otherwise in

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7 The program's criteria are meant to preclude deals which will increase the prices paid by government for goods and services. However, evidence suggests that contract prices for some goods and services have increased (IAC 1989a, p. 66).

meeting both its civil and defence objectives' (p. 93). The Committee concluded its report by stating:

> 'If, after nearly 20 years of operation, it cannot be conclusively demonstrated that policy objectives are being achieved and outweigh all direct and hidden program costs, then, it is suggested, serious consideration should be given to the abolition of the offsets policy' (p. 94).

Government purchasing policy

Commonwealth government purchasing involves expenditure estimated at around $7 billion to $8 billion each year.[8] As a consequence, the potential of government purchasing policies to affect industry is significant. On 22 September 1989 the Commonwealth Government announced changes to its purchasing policy aimed at improving the cost-effectiveness of government purchasing and encouraging the development of local industry.[9]

The new approach involves:

- a new emphasis on value for money in government purchasing, rather than price or acquisition costs;
- greater scope for government departments to settle purchasing methods within a general principle of open and effective competition. While departments will have to gazette public invitations of offers and contracts, the methods of approach to the market will not be rigidly prescribed. Staged purchasing, pre-qualification of suppliers and early notification of purchasing plans will be encouraged; and
- from 1 November 1989, abolition of the notional 20 per cent preference against imports as applied by the Commonwealth to Australian and New Zealand content.

The Government has also announced its intention to require Commonwealth Departments to pay an administrative charge equivalent to the customs duty imports from 1 October 1990 (Beddall 1990d, p. 1699).

Implications

The changes represent a positive step towards improving the efficiency of government purchasing. Moreover, with the abolition of the Commonwealth's purchasing preference, the main protective element of government purchasing policy has been removed. State Governments, however, continue to provide a preference for Australian and New Zealand content.

8 This estimate is for budget sector agencies alone and excludes expenditure by government business enterprises.

9 West (1989). The decision followed a meeting on 22 September 1989 of the Australian Industry and Technology Council, which comprises State, Territory and Federal Ministers responsible for industry and technology matters. The New Zealand Minister for Commerce attended as an observer. New Zealand is a signatory to the National Preference Agreement relating to purchasing.

In 1988–89 Commonwealth expenditure on defence functions was about $8.2 billion, which represents 2.3 per cent of gross domestic product (GDP). Approximately $7.1 billion was spent in Australia, of which $1.4 billion was on capital equipment and facilities and $1 billion on operating costs such as maintenance stores and equipment repairs. The Australian Defence Force (ADF) currently has around 88 major capital equipment projects under procurement with a total value of about $19 billion.

Two programs, the Australian industry involvement program and the defence industry development program have an important influence on the supply of equipment and related services to the ADF.

Australian industry involvement program

The Australian industry involvement program comprises three elements:

- Australian production;
- designated work; and
- defence offsets.

The Australian production component involves 'that part of a contract to be obtained from competitive Australian sources, and encompasses all activities with Australian value added, including research and development' (DOD 1989a, p. 25). Under the arrangements, contractors are expected to source equipment and services locally where it can be demonstrated that Australian industry:

- has the technological capability to supply equipment and services to the ADF; and
- is able to do so competitively, in terms of price, performance and quality.

Under designated work arrangements, the ADF 'may require that certain work activities associated with the supply of capital equipment be carried out in Australia because of their importance in the development or maintenance of industry capabilities that contribute to defence self reliance' (DOD 1989a, p. 25). The acceptability of cost premiums for designated work depends on the consequences of the work in terms of the industry capabilities created or enhanced.

Defence offsets operate in a similar way to civil offsets, with overseas companies agreeing to undertake certain activities in Australia.

Defence industry development program

The defence industry development program 'provides for the establishment of generic manufacturing and maintenance capabilities in Australian industry in support of the ADF' (DOD 1989a, p. 27). To be eligible for assistance a proposal will normally be required to be:

- consistent with a defence requirement (ADF support is required); and
- in respect of a new local industry, or an existing local industry capacity which may not be economically viable but is needed for strategic reasons.

Objective of defence procurement policies

The key objective of the Government's defence policy for Australian industry is the achievement of self reliance. The Department of Defence recently stated that:

> 'Defence self reliance demands a defence force capable of independent operations. Fundamental to independent military operations is the scientific and industrial ability to select, adapt, repair, maintain and develop defence equipment. Participation by Australian industry in the development and supply of equipment and services for the ADF is an essential factor in acquiring this capability' (DOD 1989a, p. 9).

The Department also commented that during peace time:

> 'the strategic or operational benefits to be derived from Australian participation in Defence procurement must be carefully weighed against any cost premiums, technical risks or delivery time penalties associated with local supply. In the absence of compelling strategic reasons for Australian involvement, local supply must be competitive with overseas sources' (pp. 9–10).

Costs of defence procurement policies

In a previous review, the IAC observed that defence procurement policies and programs have the potential to provide considerable assistance to Australian industries such as shipbuilding and aerospace (IAC 1988c, p. 75–8).

Some defence procurement projects have also incurred substantial cost overruns. In its review of defence project management in 1986 the Joint Committee of Public Accounts examined 16 major equipment projects. The Committee found that in 11 cases the projects 'have failed or may fail to be completed on time, to budget or to technical requirements' (JCPA 1986, p. 13). Four projects were found to 'qualify as especially unsuccessful having incurred significant cost and/or schedule overruns or persistent technical problems' (p. 13).

The Joint Committee on Foreign Affairs, Defence and Trade in a review of the management of Australia's defence commented that:

> 'there remains considerable scope for improving the efficiency of the defence procurement process and thereby either reducing the total cost of acquiring capital defence assets, or getting improved value for money' (JCFADT 1987, p. 271).

However, the Department of Defence has more recently stated that:

> 'Australian prime contractors have been specified for a number of important projects with substantial local content. This has been possible whilst maintaining design integrity and without incurring substantial penalties in cost, time and quality' (DOD 1989b, p. 37).

While defence procurement policies may yield benefits by facilitating self reliance, it is important that costs associated with achieving these benefits are clear. Given the complexity and lack of transparency of current procurement programs, it is not possible to identify and evaluate these costs.

Export assistance

The aim of Commonwealth assistance to exporters is to 'increase the export orientation of Australian industry and to help new and existing exporters to identify and exploit international market opportunities'(Keating and Walsh 1989, p. 3.228). Various strategies are employed to achieve this objective, most of which involve the Australian Trade Commission (Austrade).

The Export Market Development Grants (EMDG) scheme is the principal assistance scheme administered by Austrade. Grants under the scheme aim to encourage small to medium sized exporters to seek out and develop overseas markets for goods, specified services, industrial property rights and know-how of Australian origin. Austrade provides cash grants based on eligible expenditures incurred on export promotion in the preceding year.

Austrade also provides assistance to Australian companies through other export incentives, trade displays, the trade mission program and international projects support (including the provision of market intelligence, coordination of project opportunities and funding feasibility plans).

Austrade's finance and insurance operation, the Export Finance and Insurance Corporation (EFIC), provides loans to support Australian exports of capital goods and services. Funds to support the facility are borrowed by Austrade–EFIC at commercial rates of interest and on-lent to eligible participants, often on concessional terms.[10] Any shortfall between the commercial borrowing rates and concessional lending rates is met by a subsidy payment from the Commonwealth to Austrade.

Since 1980–81 the Commonwealth has spent about $4.1 billion (in 1989–90 dollars) on these forms of assistance to exporters (table A8.3). Export assistance declined in real terms by approximately 50 per cent between 1980–81 and 1989–90. Nevertheless, Commonwealth export assistance, at around $297 million in 1989–90 and estimated to increase to around $330 million in 1993–94, remains significant.

The Government also assists industries which export through funding other activities such as the Australian Wool Corporation and the Australian Tourist Commission (see appendix 13 for more details).

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10 In accordance with the OECD Arrangement on Guidelines for Officially Supported Export Credits.

Table A8.3
Assistance to exporters
$ million

Year	*EEG* [a]	*EMDG* [b]	*Trade & promotion*	*Interest subsidy* [c]	*Other* [d]	*Total (nominal)* [e]	*Total (real)* [f]
1980–81	200	60	26	5	6	297	594
1981–82	197	84	28	6	3	318	568
1982–83	155	105	31	15	0	306	501
1983–84	98	115	35	26	0	274	418
1984–85	11	179	43	24	0	257	368
1985–86	2	197	64	25	0	288	386
1986–87	1	92	120	20	0	233	291
1987–88	0	174	112	20	0	306	354
1988–89	0	181	102	13	0	296	313
1989–90	0	170	106	21	0	297	297

a The Export Expansions Grants scheme sought to encourage increased exports of Australian goods and services, industrial property rights and knowledge through the provision of grants based on increases in export earnings. The scheme commenced in 1978 and finished in 1983. For details see IAC (1982).

b Primarily constitutes the Export Market Development Grants scheme (accounting for 94 per cent of funds in 1989–90) but includes other assistance schemes such as the international business development scheme and the innovative agricultural marketing program.

c Interest subsidy for Export Finance Facility.

d Compensation payments relating to claims arising from action by the Government, for example, the breaking of diplomatic ties with other nations.

e Excludes government administrative costs associated with running the programs.

f GDP deflator used to convert to 1989–90 values.

Sources: Budget papers (various years), DITAC (1989b, 1990).

Recent developments

On 28 February 1990 the Government announced a five year extension of the EMDG scheme, in a revised form, and the introduction of a new discretionary scheme, the international trade enhancement program (Button 1990b, c, d).

Changes to the EMDG scheme

The main changes to the EMDG scheme, which have effect from 1 July 1990, are:

- the number of incentive payments has been limited to eight;

- the minimum expenditure threshold has been raised from $10 000 to $30 000, with expenditure after the first $15 000 being eligible for reimbursement;
- the maximum grant has been increased from $200 000 to $250 000, and the export ceiling from $20 million to $25 million — however, the grant rate has been reduced from 70 per cent to 50 per cent of eligible expenditure;
- firms can claim $200 a day as eligible expenditure for a maximum of 21 days for overseas visits in lieu of expenditure on hotels, meals and entertainment — these expenses were not eligible under the previous EMDG arrangements — and are subject to the 50 per cent rate;
- a new category of claimants, Approved Trading Bodies, has been introduced to encourage smaller firms to collaborate among themselves or with larger firms;
- the range of eligible services has been expanded — health services provided in Australia, film making, recording and similar services carried out in Australia on behalf of overseas clients, and legal services are included;
- an allocation of $5 million has been provided for grants to eligible inbound tourist operators; and
- the costs of attending education courses in exporting can be included as eligible expenditure.

As grants are paid in respect of the previous year, payments under the modified scheme will not take effect until 1991–92, when claims are expected to total $134 million.

International trade enhancement scheme (ITES)

In addition to the EMDG scheme, further export assistance is available under a new four-year export development scheme — the ITES. The scheme aims to encourage exporters or exporting groups that have overcome the initial difficulties of exporting and are ready to increase their exports substantially.

The ITES effectively replaces three existing selective schemes currently managed by Austrade: the high technology exporters scheme, the innovative agricultural marketing program, and the international business development scheme.

The key features of the ITES are:

- the maximum amount payable under the program is 50 per cent of relevant market expenditure incurred on a project. Payments are made in advance, on agreed timetables, to meet the specific requirements of projects for a maximum of three years; and
- minimum expenditure of $100 000 a year is required to qualify for assistance.

Like the assistance measures it replaced, the ITES is targeted and discretionary. Preference under the ITES will be given to: firms with a proven export record needing assistance to expand; joint ventures; firms entering new markets or promoting new products; exports with a high value added; and firms that can demonstrate a special need for discretionary support.

Firms that have received eight incentive payments under the EMDG scheme, and which are thus ineligible for further assistance under that scheme, are not excluded from receiving assistance under the ITES.

An amount of $15.9 million has been allocated for the ITES in 1990–91, increasing to $21.3 million in subsequent years.

Implications

The new arrangements, on the whole, reflect the Government's acceptance of the recommendations of the Report of the Committee for the Review of Export Market Development Assistance (the Hughes Report).[11] Despite the costs it imposes on other activities, export assistance is to continue at least until 1995. Some of the changes, such as the reduction in the grant rate and the limit on the number of payments, will act to reduce the amount of assistance provided. However, other elements, such as the increased maximum grant and increased funding for selective export assistance, tend to work in the opposite direction.

National industry extension service

The national industry extension service (NIES) was launched in July 1986. The program 'helps firms by providing them with information, assistance in selecting private sector consultants, and with subsidies for the engagement of consultants with expertise in areas such as strategic planning, marketing, manufacturing technologies, human resources, innovation and design' (Button 1990a).

NIES is coordinated by the Commonwealth, with State and Territory Governments having responsibility for administering the program. The program is jointly funded by Commonwealth, State and Territory governments. The NIES network is also used to deliver other more targeted Commonwealth and State industry measures. For example, the export improvement element of the metals-based engineering program is coordinated under the NIES.

Commonwealth funding for the NIES during 1989–90 was $18.8 million and projected funding for 1990–91 is $20.1 million. The Commonwealth has extended its funding commitment to NIES through to 30 June 1995.

In September 1989 the National Advisory Committee on Extension Services (NACES) reported to the Australian Industry and Technology Council on future directions of the service (NACES 1989). NACES considered that an important element of assistance programs such as the NIES must be effective monitoring and evaluation arrangements. One of the findings of the report was that much more

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11 For details see IAC (1989a, pp. 75–8). Not all of the Committee's recommendations were accepted. For example, its proposal to increase the minimum threshold for the payment of grants to $50 000 was rejected because it would have excluded too many small exporters.

needed to be done in 'evaluating the economic impact of some of the NIES programs, for example business planning, which have been in place for a reasonable time'. The Commonwealth and the States have begun collecting information for evaluation purposes. This is an important development which should increase transparency and facilitate the evaluation of the costs and benefits, and therefore the performance, of the NIES.

The Industry Commission is scheduled to review the program by December 1993.

The importance of R&D and innovation for competitiveness and economic growth is widely accepted. In 1987–88 approximately $3.6 billion (or 1.2 per cent of GDP) was spent on R&D in Australia.

Commonwealth assistance for R&D takes a number of forms including: funding major research agencies such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO); incentives such as the 150 per cent tax concession for R&D; funding of higher education research; and R&D grants programs for a range of sectors and areas including health, employment and education, industry and technology and primary industries and energy. Details of funding under some of these arrangements are provided in appendix 13.

Recent developments

The R&D tax concession was originally to operate from 1 July 1985 to 30 June 1991 but has been extended to 30 June 1993 at 150 per cent and from then until 30 June 1995 at 125 per cent. From 1 July 1995 expenditure on R&D will be deductible at a rate of 100 per cent. On 1 July 1988 the company tax rate was reduced from 49 per cent to 39 per cent which has reduced the effective support provided for R&D through the tax concession. In September 1989 the Government announced legislative changes to remove a loop hole which meant that syndicates carrying out R&D could claim the tax deduction of 150 per cent on funds not actually spent on R&D (Crean, 1990c).

The grants for industry research and development (GIRD) provisions have also been extended through to 1995. The discretionary grants component of that scheme has been expanded to include services, market research, waste and environmental technologies and advanced manufacturing technologies.

The national procurement development program (NPDP), which supports the demonstration, testing and research of high technology Australian products for government agencies, has been extended for five years to 1995. Commitments to new projects beyond June 1992 will be subject to government consideration of an evaluation of the NPDP to be undertaken by the Industry Commission.

The level of grants approved under these programs and the taxation revenue forgone since the respective measures were introduced are shown in table A8.4.

Table A8.4
Selected forms of R&D assistance
($ million)

	1985 –86	*1986 –87*	*1987 –88*	*1988 –89*	*1989 –90*
150 per cent tax concession	146	170	200	164 [a]	178
GIRD	–	11	26	32	32
NPDP	–	–	1	4	6

a Lower due to the reduction in the company tax rate on 1 July 1988 from 49 per cent to 39 per cent.

Sources: Budget papers (various years) and DITAC (1990).

Cooperative research centres program

In May 1990 an additional R&D program, the cooperative research centres program, was launched. The program is a response to the 'need to ensure that advances in science and technology are linked as effectively as possible to applications in industry and other sectors such as health and the environment' (PM&C 1990, p. 1).

The main objectives of the program are:

- to support long-term high quality scientific and technological research which contributes to national objectives, including economic and social development, the maintenance of a strong capability in basic research and the development of internationally competitive industry sectors;
- to capture the benefits of research, and to strengthen the link between research and its commercial and other applications, by the active involvement of the users of research in the work of the centres;
- to build centres of research concentration by promoting cooperative research, and through it a more efficient use of resources in the national research effort; and
- to stimulate education and training, particularly in graduate programs, through the active involvement of researchers from outside the higher education system in educational activities, and graduate students in major research programs.

Under the program the Government invites applications from research institutions, government departments and agencies and private companies interested in setting up a research centre. Up to 50 centres will be established over the five years from 1990–91 to 1994–95. Each centre will have to include at least one higher education institution. Although not compulsory, it is expected that in many cases a centre will also involve CSIRO or another Commonwealth or State Government organisation.

It is recognised that in some cases there will not be direct participation in research by industrial firms or government agencies. In these instances, participation can be through financial involvement, or involvement in planning and guidance of the centres.

Funding for the program will commence in 1990, with grants totalling $4 million for the first 15 centres. Over the following four years, funding will increase rapidly, reaching an estimated $100 million a year (in 1990–91 dollars) in 1994–95. This level will be maintained in real terms in subsequent years.

Funding will be provided through renewable contracts between the Commonwealth Government and the centres. In the first instance, contracts will run for five to seven years. Supplementary funding by the Commonwealth under the program will be limited to 50 per cent of the total cost of establishing and operating each centre.

Organisations participating in the program may contribute in a number of ways:

- salaries and on-costs of staff paid by the participating organisations, for the time they are engaged in the centre;
- non-salary direct costs, for example, operational funds for research-specific consumables;
- indirect support costs;
- the capital cost of items transferred to the ownership of the centre;
- imputed rent on buildings and equipment made available for use by the centre, with proportionate allowances for partial occupancy or shared use; and
- funding from other sources including industry and Commonwealth and State Governments, subject to any restrictions which may be applied by these bodies (PM&C 1990, pp. 5–6).

While at any time during the life of a centre, participating organisations may raise funds over and above those originally put forward as matching funds, these additional funds will not necessarily be matched by additional government funding.

The performance of each centre will be evaluated at least one year before the expiry of its contract. Poor performance may result in non-renewal of the contract.

Achievements of R&D assistance

Compared with OECD countries, business expenditure on R&D (BERD) in Australia as a proportion of GDP ranks low. Such comparisons are often invoked in support of government action to increase R&D activity.

In 1986 the Government set a target for BERD of 1.0 per cent of GDP to be achieved by 1990 (AIRDIB 1986, p. 46). BERD increased from 0.39 per cent of

GDP in 1985–86 to 0.52 per cent in 1988–89.[12] While BERD as a proportion of GDP has increased since 1978–79, it would have to have doubled from its 1988–89 level of $1.7 billion to achieve the 1.0 per cent target by 1990.

Such measures are, however, of limited use in evaluating the achievements of assistance to R&D. There are difficulties in isolating the effects of other factors such as activity levels, competitive pressures and expected returns. In addition, as the BIE commented in its interim report on the 150 per cent tax concession for R&D:

> 'not every R&D program will result in successful innovation, for while the results of a project could be novel, the product might be unsuccessful in the market. The point is that although an R&D effort might be associated with a successful innovation, R&D by itself does not guarantee success in the innovation stakes' (BIE 1989, p. 6).

Evaluation of the achievements of R&D support measures must also consider the range of costs associated with each of these measures. These include program administration costs, direct costs to the government (in terms of revenue forgone in the case of the tax concession and grants provided under other measures) and the costs of compliance for the firm. In addition, there are costs in the form of price pressures placed on resources for which other activities compete. This is an important consideration because the tax concession, the GIRD, the NPDP, and the recently announced cooperative research centres program each have criteria which target particular activities, leaving other activities and firms ineligible for that assistance.

Foreign aid is employed by the Australian Government as an instrument of foreign policy. However, some forms of aid can also assist Australian industry.

In 1989–90 overseas aid payments by the Australian Government amounted to over $1.1 billion. This involved aid provided under country programs of about $760 million and aid under global programs of more than $350 million (table A8.5).

Country programs cover aid which focuses on specific countries or regions. With the exception of budget support to Papua New Guinea, most is tied to the supply of Australian goods and services for developmental purposes.[13] Global programs cover aid which does not have a specific country focus, and include funding of international development organisations, Australian non-government organisations and the Development Import Finance Facility (DIFF).

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12 BERD has been as high as 0.47 per cent of GDP in 1968–69 and as low as 0.23 per cent in 1978–79.

13 In 1989–90 about 36 per cent of Australia's country program aid was allocated as unconditional budget support to Papua New Guinea.

Table A8.5
Australia's foreign aid programs
$ million

	1988–89	*1989–90*	*1990–91*[a]
Country programs			
Papua New Guinea budget support	275	275	275
Projects, technical cooperation and related activities	275	316	296
Training	121	118	113
Other	45	52	59
	717	**761**	**743**
Global programs			
Emergency aid and refugee and relief assistance	40	49	51
International development financial institutions	195	73	196
United Nations programs	76	75	76
Regional and other international organisations	20	22	23
Community and commercial programs (including DIFF)	72	117	106
Australian Centre for International Agricultural Research	17	17	17
	419	**354**	**469**
Aid administration etc	26	31	30
	1 161	**1 146**	**1 242**

a Budget estimates.

Source: Budget papers (various years).

The Australian International Development Assistance Bureau has estimated that the aid program generated purchases of Australian goods and services to a value equivalent to 87 per cent of total aid expenditure in 1987–88 (AIDAB 1990, p. 1).

Industry assistance aspects of foreign aid

In principle, the provision of foreign aid is independent of the provision of assistance to domestic industries. However, when the aid is tied to the supply of Australian goods and services, it can not only reduce the cost-effectiveness of the aid provided, but also may assist the local industries producing those goods and services. The OECD has long expressed concern that tied aid can result in trade distortions.

There are unlikely to be significant effects on industry assistance where the goods and services used for tied aid are a small part of total Australian supply, there are many potential Australian suppliers and there is open competition for the supply of goods and services for aid purposes. The potential for additional assistance to be conferred by tied aid is greater where the local industry produces goods quite differentiated from foreign suppliers and where local producers have some degree of market power (IAC 1985a, pp. 82–6).

The level of assistance provided to Australian industry through tied aid is therefore difficult to determine. Assistance will depend primarily on the manner in which particular schemes are administered and the underlying market conditions facing particular industries and firms.

Assistance from DIFF

DIFF assists Australian exporters of capital goods and services to compete for development projects. It is a 'mixed credit' scheme which combines aid funds in grant form with loans provided through the Export Finance and Insurance Corporation. The effect of the aid component is to create a concessional or 'soft' finance package to accompany a capital project bid in a developing country.

Since the mid-1980s, DIFF has been expanded while total Australian expenditure on aid has declined in real terms. DIFF allocations have grown from $16 million in 1986–87 to $93 million in 1989–90, increasing DIFF's proportion of the foreign aid budget from 2 per cent to 8 per cent. For 1990–91, DIFF allocations are budgeted to be $84 million, some 7 per cent of the foreign aid budget.

Following a review of the scheme in 1989, the Government limited DIFF funding to a maximum of $100 million a year in real terms from 1990–91; a maximum of 40 per cent of funds each year can be provided to any one country; and a maximum of $75 million applies for any single project, with a minimum grant of $500 000.

Australian firms seeking DIFF funds must provide evidence that competing foreign firms receive mixed credit support from their governments, except for projects in countries designated as 'spoiled markets' which are considered by the Australian

Government as particularly prone to mixed credit competition.[14] To be eligible for DIFF support, the equipment or service being supplied must be wholly or mainly of Australian origin (usually greater than 80 per cent), and the project must meet a range of other economic and social criteria.

DIFF funding is based on the 'Eligible Contract Value' (ECV). The ECV takes into account: the value of the goods and services (provided they are wholly or mainly of Australian origin); the cost of freight and related insurance services; and, in some cases, local costs in recipient countries (up to 15 per cent of the value of the other items). The DIFF grant is normally 35 per cent of the ECV, but a minimum subsidy of 50 per cent of the ECV applies in countries with 'least developed' status.

By lowering the price of tenders, DIFF enables Australian firms to win overseas development contracts they would otherwise miss out on. In doing so, very high assistance can be provided to those activities. For example, while varying with the composition of each project, a DIFF grant of 35 per cent of the ECV can provide effective assistance in the order of 100 per cent.

While other countries' aid policies undoubtedly affect the competitiveness of Australian firms in developing country markets, it is not clear that Australia should embrace subsidies solely on the basis that other countries do so. To the extent that foreign governments' tied aid and mixed credit policies are of a long-term nature, they are part of the environment determining the comparative advantage of Australian industry.

14 DIFF specifically excludes defence equipment, luxury goods, raw bulk materials and consumer durables. While DIFF does not target particular industries, firms obtaining DIFF funds are most often from the service, construction, agricultural, energy, communications and transport industries.

Appendix 9
Assistance to agriculture

This appendix reports on the Commission's estimates of assistance to agricultural commodities for the period 1985–86 to 1988–89.[1] Revised estimates of assistance levels in the mid-1990s — reflecting the end points for phased assistance reductions announced in the May 1988 Economic Statement — are also included.[2]

The estimates for 1988–89 indicate that assistance to agriculture has continued to decline. Since 1987–88 the average nominal rate of assistance has fallen by 1 percentage point to 3 per cent, and the average effective rate of assistance has declined from 11 per cent to 9 per cent. Disparities in the level of assistance afforded individual commodities in the sector have maintained their downward trend.

The following estimates take account of the major forms of Commonwealth Government assistance to the agricultural sector. These include tariffs, domestic pricing and underwriting arrangements and income tax concessions. Where State Government interventions raise prices of agricultural commodities, they are also included. State assistance provided through expenditure on items such as agricultural extension services and research are not taken into account. Any assistance (positive or negative) which may arise from regulation or the government provision of infrastructure, such as water, are also excluded from the estimates.

The Commission uses the following standard measures to report on the level of assistance to agriculture:

- assistance to agriculture, by form (table A9.1, pages 130–1);
- price distortions and producer transfers for agricultural commodities (table A9.2, pages 132–4);
- nominal and effective rates of assistance and standard deviations of assistance for agricultural activities (table A9.3, pages 135–7); and
- projected nominal and effective rates of assistance for agricultural activities in the mid-1990s (table A9.4, page 138).

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1 Estimates for 1985–86 to 1987–88 have been published in previous IAC annual reports. In some instances, the estimates have been revised.

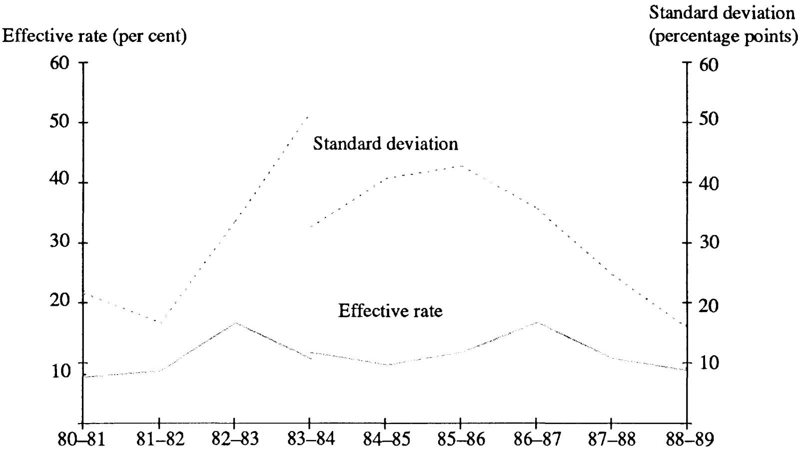
2 For a description of these reductions and initial estimates of mid-1990s assistance levels see IAC (1988c).

These measures summarise, on a consistent basis, the different forms of assistance provided to agriculture and indicate the different incentives structures facing individual agricultural commodities. Details of the methodology and the measures of assistance used are provided in IAC (1987a).

Trends in measured assistance

The average nominal and effective rates of assistance to the agricultural sector decreased in 1988–89 and are the lowest recorded in the current series. Since 1983–84, the first year in the current series of estimates, assistance to the sector has declined in all years except 1985–86 and 1986–87. Over the period 1983–84 to 1988–89 the average nominal assistance on agricultural outputs declined by 45 per cent. The average effective assistance was reduced by 28 per cent over the same period (figure A9.1).

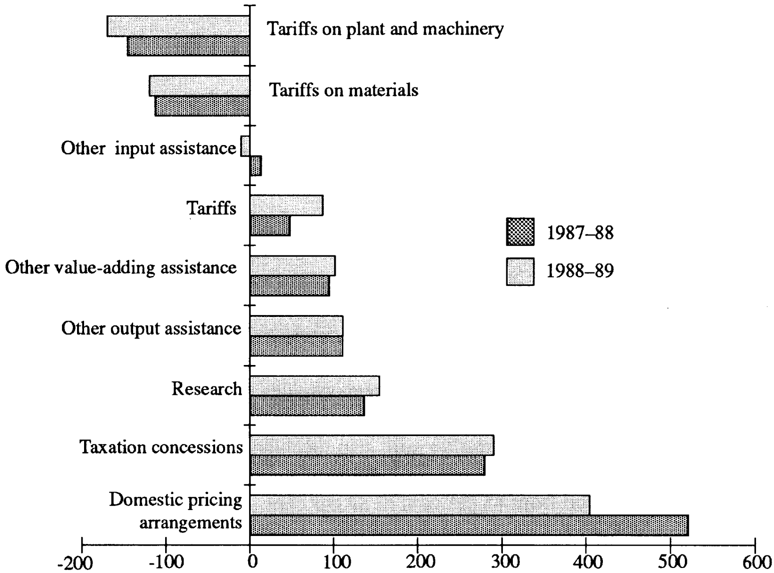
Figure A9.1
Effective rates of assistance and disparities in assistance to agriculture: 1980–81 to 1988–89



The reduction in assistance in 1988–89 reflected an increase in the value of sector output combined with a decrease in the net assistance provided to the sector. The most significant change in forms of assistance was the decline in assistance from domestic pricing arrangements (figure A9.2). Due to the difficulty experienced in obtaining appropriate data, estimates of assistance for 1988–89 do not include the producer transfer arising from domestic pricing arrangements for the egg industry.[3]

3 New South Wales export prices were formerly used as the benchmark for the measurement of assistance to the egg industry. Following the deregulation of the NSW egg market and the sale of the NSW Egg Corporation's assets, it was not possible to obtain the required price information. It is anticipated that an alternative benchmark will be used next year.

Figure A9.2
Assistance to agriculture, by form: 1987–88 and 1988–89
($ million)



This form of assistance to the egg industry amounted to $22.7 million in 1987–88. If a similar level of assistance applied to eggs in 1988–89, the decline in sectoral assistance resulting from domestic pricing arrangements would have been around $94 million.

The 1988–89 estimates incorporate the first step in the phasing of tariff rates under the tariff reduction program announced in May 1988. However, compared with the manufacturing sector, tariffs provide a relatively small proportion of the total assistance afforded to agriculture. In 1988–89 tariffs provided 93 per cent of output assistance to the manufacturing sector but only 14 per cent of output assistance to the agricultural sector. Tariff assistance directly affects output assistance to citrus, currants, raisins, wine grapes, vegetables and tobacco. Tariff phasing will also result in a reduction of the upper limit on assistance provided under the domestic pricing arrangements for sugar and currants and raisins. Since 1 January 1988 imports of fresh vegetables have been duty free.

Reductions in manufacturing sector tariffs have also reduced penalties on material and capital inputs used by the agricultural sector. The Commission has revised its estimates of the tax effect of tariffs on materials and capital inputs for the period 1985–86 to 1988–89 and has incorporated the tariff phasing announced in the May 1988 Economic Statement.

Upon the introduction of the Harmonized Tariff on 1 January 1988, assistance to currants, raisins, grapes and citrus juice was altered from specific tariffs to ad valorem tariffs. This resulted in an increase in tariff assistance (figure A9.2). Hence, the phased reductions in tariff assistance for these commodities will not be reflected until 1989–90.

The only other commodity to receive a significant increase in assistance in 1988–89 was tobacco. Assistance to the tobacco industry rose as the domestic price was increased under domestic pricing arrangements at a time when the average price of comparable tobacco imports was falling. The nominal rate increased by 19 percentage points to 56 per cent and the effective rate by 43 percentage points to 111 per cent.

Significant reductions in assistance between 1987–88 and 1988–89 were recorded by both the dairy and sugar industries. The effective rate of assistance to the dairy industry declined significantly from 114 per cent to 55 per cent while the nominal rate fell from 38 per cent to 22 per cent. The increase in dairy export prices led to lower rates of export subsidy being provided by market support payments. This, combined with the phasing down of assistance provided under the supplementary support scheme (which ended on 30 June 1989), resulted in a decline in assistance levels to manufacturing milk. Market milk also received lower levels of assistance as output assistance from the domestic pricing arrangements declined — the average price distortion reduced from 48 per cent to 32 per cent.

In 1988–89 the nominal and effective rates of assistance to the sugar industry declined by 4 and 12 percentage points to 9 per cent and 20 per cent respectively. This was largely due to the decline in the rate of assistance to output, reflected in a reduction from 57 per cent to 38 per cent in the price distortion between the controlled domestic price and the export price. Assistance arrangements for the sugar industry in 1988–89 depended on an embargo on sugar imports. This embargo was lifted from 1 July 1989 and replaced by a specific tariff of $115 a tonne on sugar imports. If this new arrangement had applied in 1988–89, then the price distortion would have been maintained at about 57 per cent.

Assistance to the wool industry remains low. Wool production reached record levels in 1989–90 whilst demand for wool declined. These two factors resulted in a large build up of stocks held by the Australian Wool Corporation. In May 1990 the Minister for Primary Industries and Energy directed that the minimum reserve price for wool be reduced from 870 cents to 700 cents a kilogram and announced that a Commonwealth Government guarantee would be provided on all borrowing by the Australian Wool Corporation until July 1992. This guarantee has the potential to provide assistance to the wool industry by enabling the Australian Wool Corporation to obtain loans at cheaper interest rates. Appendix 15 contains additional information on wool marketing arrangements.

Disparities in effective assistance levels between commodities are an important indicator of the potential for efficiency losses from distortions in resource use. Similarly, wide disparities in nominal assistance for similar consumer goods indicates the potential for losses in consumption efficiency. The average disparity in assistance levels between the agricultural commodities, as measured by the standard deviation, has continued to decline (figure A9.1). The only commodities that had nominal and effective rates of assistance significantly greater than the average were dried vine fruits, wine grapes, citrus, tobacco, sugar, rice and dairy.

Initial estimates of assistance to agriculture in the mid-1990s — reported in appendix 2 of the IAC 1987–88 Annual Report — were based on 1986–87 data. The revised mid-1990s estimates presented here are based on 1987–88 data (table A9.4). The estimates take account of changes announced in the May 1988 Economic Statement, including tariff reductions and the removal of the supplementary support assistance to the dairy industry. The tax penalty arising from tariffs on materials and capital has also been revised since the previous estimates. Some forms of assistance provided to agriculture — such as that provided under the domestic pricing arrangements — are highly sensitive to price levels in international markets. Price fluctuations between the two base years mean that the revised estimates for some commodities differ significantly from the initial estimates. A decline in export prices and the value of agricultural output in 1990–91 is forecast. These expected lower returns to the agricultural sector indicate an upward pressure on assistance levels.

Domestic marketing arrangements provide a major form of assistance to agriculture. Projections of estimates of assistance to agriculture in the mid-1990s assume existing policies remain in place. However, State and Commonwealth marketing arrangments are increasingly being questioned. Statutory marketing arrangements for primary products are currently under reference to the Industry Commission and a number of arrangements are also under review at the State level.

Table A9.1
Assistance to agriculture, by form[a]: 1985–86 to 1988–89
($ million)

	1985–86	*1986–87*	*1987–88*	*1988–89*
Assistance to outputs				
Domestic pricing arrangements[b]	559	619	521	404
Export incentives	1	1	18	15
Export inspection services	40	48	37	45
Local content schemes	15	9	19	23
Marketing support	33	37	35	27
Underwriting arrangements[c]	17	201	2	–
Tariffs	51	56	48	87
	716	971	680	601
Assistance to value-adding factors				
Adjustment assistance	51	65	64	66
Agricultural research	101	120	137	155
Income taxation concessions[d]	101	180	280	290
Natural disaster relief	38	39	31	36
	291	404	512	547
Assistance to inputs				
Disease control[e]	14	18	14	9
Fertiliser subsidies	52	–	–	–
Stockfeed[f]	- 34	- 9	..	- 19
Tariffs on materials[g]	- 123	- 97	- 113	- 120
Tariffs on plant and machinery[g]	- 196	- 122	- 146	- 170
	- 287	- 210	- 245	- 300

– Nil.

.. less than $0.5 million

a This table covers total assistance to the agricultural sector. A small amount of assistance provided through general measures (eg income tax concessions) assists activities for which nominal and effective rates have not been estimated.

b The amount of assistance derived from domestic pricing arrangements for certain products is increased by import restrictions (eg tariffs on dried vine fruits and an embargo on sugar imports) which enable the domestic price to exceed the landed duty free price of competing imports.

c Includes the payment of a second advance of $33.8 million made in July 1990 to the Australian Wheat Board for the 1986–87 wheat crop. A final payment is expected mid-1991.

d Includes assistance provided to primary producers through the income tax averaging provisions. Estimates of the assistance from the income tax averaging provisions were provided by the Treasury.

e Covers assistance provided by the bovine tuberculosis and brucellosis eradication campaign.

f The estimated effects of the domestic pricing arrangements for stockfeed wheat on the pig, poultry and egg activities. These arrangements can either tax or subsidise user industries depending on whether the stockfeed price is above or below the comparable export price.

g The additional costs incurred by farmers due to assistance measures that raise the prices of manufactured inputs.

Source: Commission estimates.

Table A9.2
Price distortions[a] and producer transfers[b] for agricultural commodities: 1985–86 to 1988–89

Commodity	*1985–86* Price distortion	*1985–86* Producer transfer	*1986–87* Price distortion	*1986–87* Producer transfer	*1987–88* Price distortion	*1987–88* Producer transfer	*1988–89* Price distortion	*1988–89* Producer transfer
	%	*$m*	*%*	*$m*	*%*	*$m*	*%*	*$m*
Domestic pricing arrangements								
Dairying and other animal products								
Cheese	26	63	55	119	33	98	24	76
Butter	53	64	89	70	67	58	40	36
Skim milk powder	4	5	37	18	38	25	19	19
Wholemilk powder	4	3	42	8	25	8	17	6
Casein	2	..	41	1	33	1	19	1
Market milk[c]	75	226	56	205	48	192	32	152
Eggs[d]	39	55	52	62	25	23	d	d
Honey	1	..	1	..	1	..	1	..
Fruits and vegetables								
Dried vine fruits[e]								
Sultanas	42	13	27	9	52	16	45	13
Currants	13	1	12	1	15	1	20	1
Raisins	14	1	15	1	15	..	20	1
Deciduous canning fruits[f]	43	4	51	4	f	f	0	0

Commodity	1985–86 Price distortion	1985–86 Producer transfer	1986–87 Price distortion	1986–87 Producer transfer	1987–88 Price distortion	1987–88 Producer transfer	1988–89 Price distortion	1988–89 Producer transfer
	%	$m	%	$m	%	$m	%	$m
Grains								
Rice[g]	36	8	44	12	49	14	67	19
Wheat								
Human use	17	35	13	26	2	5	2	6
Stockfeed	6	2	2	..	..	..	3	1
Industrial	3	2	-2	-1	-2	-1	1	..
Other crops								
Sugar[h]	80	73	53	66	57	72	38	62
Cotton	10	3	53	16	20	9	27	9
Tariffs								
Wine grapes	16	15	16	17	18	27	21	53
Citrus	18	19	19	18	10	12	25	34
Potatoes	8	13	8	17	4	7	0	0
Onions	1	..	1	1	1	..	0	0
Tomatoes	1	1	1	1	1	1	0	0
Other vegetables[i]	1	2	1	2	1	1	0	0
Local content schemes								
Tobacco[j]	29	15	14	8	34	19	43	23

.. Producer transfer less than $0.5 million or price distortion between - 0.5 per cent and 0.5 per cent.

a The price distortion is the proportional difference between the domestic price of a commodity and the price that would prevail without assistance. For export-competing commodities, it is the proportional difference between the domestic and comparable export prices. For import-competing commodities, it is the proportional difference between the domestic and import (landed duty free) prices. In the case of tariff assistance, the price distortion is the tariff rate applying to imports expressed as a percentage of the landed duty free price.

b Producer transfers represent the income transfer to farmers from domestic consumers due to domestic prices being maintained above export or import parity prices. A negative transfer indicates a transfer from farmers to domestic consumers. The transfers are derived for export industries either by multiplying the difference between the domestic and comparable export price by domestic sales or by multiplying the difference between the average prices received by farmers and comparable export prices, by production. With the exception of sugar and deciduous canning fruits, it is assumed that all the transfer accrues to the farming activity.

c Producer transfers were calculated for each State by multiplying the difference between the State market milk price and a notional deregulated price, by market milk sales in the State. For NSW, Qld and SA, the deregulated price was assumed to be the Vic manufacturing milk price plus freight from Vic to the respective States. For WA and Tas, the deregulated price was assumed to be the local manufacturing milk price, and for the winter months it was the local manufacturing milk price plus the Vic winter incentive. The price distortion is the producer transfer expressed as a proportion of the unassisted value of market milk.

d Estimates of assistance to egg production have been calculated for 1986–87 and 1987–88 using a revised methodology which is more consistent with that applied to other industries. The price differential obtained on the domestic market for shell and pulp eggs due to the marketing arrangements was estimated directly by comparing the domestic wholesale prices in each State with average export prices for NSW shell and pulp eggs. NSW is the major exporting state. The price distortion and producer transfer have not been calculated for 1988–89 due to the difficulty in obtaining appropriate data for NSW following the deregulation of the NSW egg market and the sale of the NSW Egg Corporation's assets.

e It is assumed that, in the absence of the industry's marketing arrangements, only sultanas would be an export-competing commodity. Thus export parity prices were used to measure the price distortions and producer transfers for sultanas, whereas import parity prices were used for currants and raisins.

f Producer transfers estimated at 20 per cent to 30 per cent of the total transfer based on respective value-added shares between the growing and canning activities. The price distortion and producer transfer have not been calculated for 1987–88. Price data were not available following the winding up of the Australian Canned Fruits Corporation on 31 December 1988.

g Estimates have been derived by comparing domestic and export prices for medium and long grain rice. As separate domestic and export prices for short and long grain rice were not available for 1987–88, it was necessary to estimate these prices from the average prices supplied by the Ricegrowers' Co-Operative Limited. The price distortion for rice grown in Qld is based on the difference between average domestic and comparable export prices for rice grown in NSW.

h Producer transfer estimated as two-thirds of the total transfer on the assumption that one-third of the transfer flows to millers.

i Includes beans, cabbages, brussel sprouts, carrots, cauliflowers, lettuces, peas and pumpkins.

j Transfers were derived by applying the price differential between Australian-grown green leaf and the notional import price of non-USA green leaf to the domestic sales of Australian-grown leaf.

Source: Commission estimates.

Table A9.3
Nominal and effective rates of assistance and standard deviations of assistance for agricultural activities: 1985–86 to 1988–89 [a]
(per cent)

	Nominal rate of assistance on outputs [b]				*Effective rate of assistance* [c]			
Activity/commodity description	*1985 –86*	*1986 –87*	*1987 –88*	*1988 –89*	*1985 –86*	*1986 –87*	*1987 –88*	*1988 –89*
Horticulture								
Apples and pears	0.5	0.4	1.0	0.4	- 1.5	0.9	2.6	1.1
Dried vine fruits	18	17	25	26	33	38	57	57
Wine grapes	16	16	18	21	33	42	39	48
Citrus	18	19	10	25	32	37	20	50
Deciduous canning fruits [d]	23	28	0.9	0.8	59	77	9.2	6.9
Bananas	0.5	0.0	0.6	0.3	- 0.5	0.5	1.8	0.9
Tobacco	38	16	37	56	63	24	68	111
Potatoes	8.0	8.0	3.1	0.1	15	21	6.1	- 3.1
Onions	1.4	1.4	3.5	1.3	- 0.8	1.2	5.9	1.7
Tomatoes	1.4	1.4	0.7	0	- 1.8	0.6	0.3	- 1.2
Other vegetables [e]	1.7	1.4	2.5	0.8	- 1.1	0.9	3.9	0.4
Average	**8.9**	**7.3**	**7.3**	**8.2**	**14**	**14**	**15**	**16.5**
Extensive cropping								
Wheat	2.0	14	0.3	0.6	3.8	35	2.8	1.4
Barley	0.0	0.0	0.2	0.1	0.3	2.6	2.3	0.6
Oats	0.0	0.0	0.3	0.3	1.8	3.5	1.8	0.2
Maize	0.0	0.0	0.0	0.1	- 2.1	0.1	- 0.2	- 1.3
Sorghum	0.0	0.0	0.2	0.2	0.7	1.5	1.6	0.0
Oilseeds	0.0	0.0	0.2	0.1	- 1.9	- 1.2	3.3	3.4
Average	**1.5**	**10**	**0.3**	**0.5**	**2.7**	**24**	**2.6**	**1.2**

Activity/commodity description	*Nominal rate of assistance on outputs*[b] 1985–86	1986–87	1987–88	1988–89	*Effective rate of assistance*[c] 1985–86	1986–87	1987–88	1988–89
Extensive irrigation and high-rainfall crops								
Sugar	21	13	13	9.0	63	33	32	20
Cotton	1.0	4.5	2.1	1.7	0.9	6.6	6.2	5.7
Rice [f]	11	19	17	18	26	59	50	50
Average	**12**	**10**	**9.1**	**6.8**	**24**	**20**	**19**	**14**
Extensive grazing								
Beef	1.3	1.3	1.1	1.2	5.7	7.7	9.0	9.3
Wool	1.3	1.2	0.7	0.7	2.4	4.2	2.8	2.8
Sheepmeat	1.9	1.6	1.0	1.2	3.0	4.3	3.4	3.6
Average	**1.3**	**1.2**	**0.9**	**0.9**	**3.9**	**5.7**	**4.8**	**4.9**
Intensive livestock								
Pigs	0.0	0.1	0.2	0.1	- 11	0.7	4.2	- 2.3
Poultry	0.0	0.0	0.1	0.1	- 4.1	- 0.2	6.0	3.3
Eggs [g]	29	35	10	g	51	71	22	g
Dairying	49	50	38	22	159	184	114	55
Manufacturing milk	31	46	31	17	80	156	85	39
Market milk	76	56	49	30	> 250	227	173	82
Honey	1.3	1.1	2.5	2.7	1.1	0.9	6.7	7.6
Average	**22**	**23**	**17**	**11**	**54**	**69**	**49**	**29**
Total agriculture								
Average	6.1	7.5	4.3	3.3	12	18	11	8.6
Standard deviation [h]	(14)	(13)	(10)	(7)	(43)	(36)	(25)	(16)

- a Due to the increasing number of activities in receipt of low levels of assistance the Commission has, for the first time, reported rates of less than 10 per cent rounded to one decimal point. Estimates of 10 per cent or greater continue to be rounded to whole numbers. The presentation of some estimates to one decimal point should not be interpreted as implying any greater degree of precision than previous estimates. The new form of presentation simply enables the detection of small movements in rates that would otherwise be hidden in estimates presented as whole numbers.
- b Average nominal rates on output are weighted by the unassisted value of output of each activity.
- c Average effective rates are weighted by the unassisted value added of each activity.
- d The required price data were not available for 1987–88 following the winding up of the Australian Canned Fruits Corporation on 31 December 1988, hence the producer transfer is not included in the 1987–88 estimate.
- e Includes beans, cabbages, brussels sprouts, carrots, cauliflowers, lettuces, peas and pumpkins.
- f Estimates have been derived by comparing domestic and export prices for medium and long grain rice. As separate domestic and export prices for short and long grain rice were not available for 1987–88, it was necessary to estimate these prices from the average prices supplied by the Ricegrowers' Co-Operative Limited. The price distortion for rice grown in Qld is based on the difference between average domestic and comparable export prices for rice grown in NSW.
- g Estimates of assistance to egg production have been calculated for 1986–87 using a revised methodology which is more consistent with that applied to other industries. The price differential obtained on the domestic market for shell and pulp eggs, due to the marketing arrangements, was estimated directly by comparing the domestic wholesale prices in each State with average export prices for NSW shell and pulp eggs. NSW is the major exporting state. The nominal and effective rate were not calculated for 1988–89 due to the difficulties experienced in obtaining data for NSW following the deregulation of the NSW egg market and the sale of the NSW Egg Corporation's assets. It is anticipated that an alternative benchmark will be used next year.
- h The standard deviation in percentage points measures how far from the average the items in a frequency distribution are located, thereby measuring the extent of variation or dispersion in the distribution. The larger the variability amongst individual activities' nominal or effective rates, the larger the standard deviation.

Source: Commission estimates.

Table A9.4
Projected nominal and effective rates of assistance for agricultural activities: mid-1990s
(per cent)

	Nominal rate on outputs		*Effective rates of assistance*	
Commodity	*mid 90s* [a]	*mid 90s* [b]	*mid 90s* [a]	*mid 90s* [b]
Manufactured milk	21	15	71	36
Market milk	57	49	212	179
Sugar	3	7	6	15
Tobacco	13	11	22	21
Dried vine fruits	10	25	21	62
Wheat	1	0	4	3
Citrus	8	14	15	27
Wine grapes	12	13	27	34
Total agriculture	4	3	9	10

a Initial estimates based on 1986–87 data were published in IAC (1988c).

b Revised estimates based on 1987–88 data.

Source: Commission estimates.

Appendix 10
Assistance to mining

The Industry Commission currently has a reference on mining and minerals processing.

Estimates of assistance to minerals processing industries are reported annually as part of the Commission's monitoring of assistance to manufacturing industries (appendix 11). There has, however, been no similar monitoring of the assistance provided to mining industries. The only available estimates of assistance to mining industries are those published by the Australian Bureau of Agricultural and Resource Economics (and updated in its submission to the current mining and minerals processing inquiry) based on data provided by the IAC (ABARE 1988).

This appendix presents preliminary estimates of assistance to the mining industries for 1983–84 and 1988–89 using a new estimation methodology. Projections to the end of current tariff phasing arrangements — termed the mid-1990s — are also included. The initial focus has been on the effects of border assistance on mining industries. The estimates can be extended to incorporate the effect of other assistance measures and, in the final section of this appendix, estimates of effective assistance to mining incorporating some non-border assistance measures are provided.

Neither the Commission's agriculture nor manufacturing assistance measurement systems could be easily adapted to provide estimates for the mining sector. For mining, information about industry activity levels is available from the Australian Bureau of Statistics (ABS) mining industry collection. However, detailed input cost data are not available from this collection. ABS input-output data and supplementary material have therefore been used to derive cost structures for the mining industries. With the derived cost structures, it was possible to estimate the effects of assistance on fixed capital inputs as well as intermediate (material) inputs. The manufacturing measurement system provides estimates of the effects of assistance to only intermediate inputs.

Measurement of industry outputs and of the costs incurred in producing those outputs has been made on an ex mine basis to be consistent with: the ex factory basis used for manufacturing (including minerals processing); the ex farm basis used for agriculture; and the cost, insurance and freight plus duty basis used for valuing imports.

A special feature of mining is the importance of naturally occurring mineral deposits as a factor of production, or value adding factor. Some of the returns to mineral deposits are appropriated directly as royalties and those payments are reflected in industry output and value added estimates. Other mineral returns, however, are appropriated beyond the mine site (for example, as is acknowledged to be the case for some rail charges for black coal). To provide estimates of output and value added for mining comparable to those for manufacturing and agriculture, an attempt has been made to identify and measure such mineral returns and to adjust ex mine and value added data accordingly.

The significance of mineral returns in determining the level of mining industry output, and the relative importance of industries within the sector, changes over time. The 1987–88 industry structure has been adopted in this study and is characterised by lower returns to crude oil than prevailed in the early 1980s when returns to those resources were relatively high. In interpreting the estimates presented in this appendix, it should be noted that higher mineral returns than prevailing in 1987–88 would diminish the relative importance of other costs of production and reduce the magnitude of the effective rates.

Levels of border assistance

There is virtually no border assistance to the output of mining industries apart from tariffs on some non-metallic mineral items (for example, marble, granite, chalk and mica). The main effect of border assistance is to raise input costs to mining industries.

Estimates of nominal and effective assistance for 1988–89 that take account of border interventions on outputs and inputs of intermediate and capital goods are given in table A10.1. As indicated, the price raising effect of border assistance is estimated to be over 2 per cent for intermediate inputs and nearly 4 per cent for capital inputs.[1] The combined cost of intermediate and fixed capital inputs to mining is increased by nearly 3 per cent.

There is some variability between industries, with the estimated cost of assistance to capital items being highest for Ferrous metal ores and mineral exploration activities (at around 6 per cent of the cost of capital) and lowest for Non-ferrous metal ores at around 3 per cent. For intermediate inputs, estimates of the cost of assistance vary between 1 per cent for Mining and exploration services nec to over 3 per cent for industries in the Non-ferrous metal ores group.

After account is taken of the effects of assistance to outputs and inputs, the estimated average effective rate of assistance to mining is negative at about minus 2 per cent. This indicates that the initial impact of border assistance is to raise mining costs above international levels, reducing competitiveness and discouraging domestic mining activity.

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1 Estimation of inputs at the 16 mining ASIC industry level necessitated disaggregating information on the five ABS input-output mining industries.

There has been virtually no border assistance to the output of the mining sector and this is projected to continue.

The effect of border assistance on industry costs declined between 1983–84 and 1988–89 and is expected to decline further by the mid-1990s. The estimates in table A10.2 show that the combined nominal rate on intermediate and capital inputs to mining was over 3 per cent in 1983–84, reduced to under 3 per cent in 1988–89 and is projected to decline to just over 2 per cent in the mid-1990s. Similar reductions are shown for individual mining industries.

Average effective rates of assistance to mining for 1983–84, 1988–89 and a projection for the mid-1990s are given in table A10.3. For the sector, the average effective rate of assistance from border interventions is projected to change from minus 2.5 per cent in the 1980s to minus 1.8 per cent by the mid-1990s. This reflects declining assistance to the inputs used by mining.

In addition to border assistance, the mining industries are influenced by Commonwealth and State Government regulations, controls, expenditures and charges. The effect of many potentially important interventions on the costs of the mining industry are difficult to estimate. However, there are a number of interventions involving government expenditures that can be quantified and brought into account. For example, mining industries only receive a partial rebate of the diesel fuel excise for off-road use. The cost penalty associated with the partial rebate has been estimated by ABARE to exceed $30 million for mining. Recognising this cost penalty leads to a marginal decline in the average effective rate for 1988–89 from minus 2.4 per cent to minus 2.6 per cent. The effect on assistance to individual industries is similarly small.

Assistance to the use of value adding factors in mining is also provided by governments. A major intervention has been the exemption of gold mining income from taxation. This exemption is to be repealed from 1 January 1991. But for this exemption, the tax otherwise payable by goldminers would have been of the order of $300 million in 1987–88 (Treasury 1989).[2] Taking this estimate into account, the measured effective rate for gold mining increases from minus 2.7 per cent to around 12.5 per cent. The measured negative effective assistance for the sector as a whole reduces from minus 2.4 per cent to about minus 1.3 per cent.

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2 This is a gross estimate of the taxation revenue forgone as it does not take account of the taxation of dividends of gold mining companies and capital gains derived from equity holdings in gold companies. The net assistance effect of the exemption would be less. In its estimates, ABARE has attempted to measure the net assistance effect.

Table A10.1
Average nominal and effective rates of border assistance by mining industry: 1988–89[a]
(per cent)

		Nominal rates				
			Intermediate and fixed capital inputs			
ASIC codes	*Industry*	*Output*	*Interm.*	*Capital[b]*	*Combined[c]*	*Effective rates[d]*
	Ferrous metal ores					
1111, 2	Ferrous metal ores	0.0	2.8	5.5	3.8	- 4.1
	Non-ferrous metal ores					
1121	Bauxite	0.0	3.3	2.8	3.0	- 1.9
1122	Copper ores	0.0	3.4	2.8	3.3	- 3.9
1123	Gold ores	0.0	3.2	2.8	3.1	- 2.7
1124	Mineral sands	0.0	3.1	2.8	3.0	- 3.2
1125	Nickel ores	0.0	1.7	2.8	2.1	- 2.1
1126	Silver-lead-zinc ores	0.0	3.4	2.8	3.2	- 2.9
1127	Tin ores	0.0	3.4	2.8	3.2	- 3.1
1128	Uranium ores	0.0	2.9	2.8	2.8	- 2.3
1129	Non-ferrous metal ores nec	0.0	3.4	2.8	3.2	- 2.8
	Coal, oil and gas					
1201	Black coal	0.0	2.8	3.4	3.0	- 2.2
1202	Brown coal	0.0	2.0	3.4	2.3	- 1.5
1300	Crude oil and natural gases	0.0	1.3	3.4	2.6	- 1.5
	Other minerals					
1401–1505	Other minerals	0.7	3.0	4.9	3.5	- 2.7
	Services to mining					
1611, 2	Petroleum and mineral exploration (own account)	0.0	1.8	6.3	1.9	- 9.1
1620	Mining and exploration services nec	0.0	0.9	6.3	2.0	- 3.0
	Total mining	**0.0**	**2.4**	**3.7**	**2.8**	**- 2.4**

a Preliminary estimates.

b In disaggregating estimates from the input-output industry level to the ASIC class level, it has been assumed that the commodity composition of capital of industries within each input-output industry is similar. Reflecting this assumption, similar nominal rates on fixed capital are used within each industry group (ie Non-ferrous metal ores, Coal oil and gas and Services to mining).

c Estimated with respect to total unassisted intermediate and fixed capital inputs.

d Derived using intermediate and fixed capital inputs combined.

Source: Commission estimates.

Table A10.2
Average nominal rates of border assistance on inputs to mining: 1983–84, 1988–89 and the mid-1990s[a]
(per cent)

ASIC codes	*Industry*	*1983–84*	*1988–89*	*Mid 90s* [b]
	Ferrous metal ores			
1111, 2	Ferrous metal ores	4.6	3.8	2.8
	Non-ferrous metal ores			
1121	Bauxite	3.5	3.0	2.3
1122	Copper ores	3.9	3.3	2.5
1123	Gold ores	3.6	3.1	2.3
1124	Mineral sands	3.7	3.0	2.3
1125	Nickel ores	2.4	2.1	1.6
1126	Silver-lead-zinc ores	3.7	3.2	2.4
1127	Tin ores	3.7	3.2	2.4
1128	Uranium ores	3.3	2.8	2.1
1129	Non-ferrous metal ores nec	3.7	3.2	2.3
	Coal, oil and gas			
1200	Black coal	3.6	3.0	2.2
1202	Brown coal	2.6	2.3	1.8
1300	Crude oil and natural gases	3.2	2.6	1.8
	Other minerals			
1401–1505	Other minerals	4.2	3.5	2.7
	Services to mining			
1611, 2	Petroleum and mineral exploration (own account)	2.3	1.9	1.5
1620	Mining and exploration services nec	2.8	2.0	1.6
	Total mining	**3.4**	**2.8**	**2.1**

a Preliminary estimates.
b Projections.
Source: Commission estimates

Table A10.3
Average effective rates of border assistance to mining: 1983–84, 1988–89 and the mid-1990s[a]
(per cent)

ASIC codes	*Industry*	*1983–84*	*1988–89*	*Mid 90s* [b]
	Ferrous metal ores			
1111, 2	Ferrous metal ores	- 4.3	- 4.1	- 2.4
	Non-ferrous metal ores			
1121	Bauxite	- 0.4	- 1.9	- 1.5
1122	Copper ores	- 1.5	- 3.9	- 3.1
1123	Gold ores	- 3.1	- 2.7	- 2.1
1124	Mineral sands	- 3.2	- 3.2	- 2.5
1125	Nickel ores	- 2.4	- 2.1	- 1.6
1126	Silver-lead-zinc ores	- 3.4	- 2.9	- 2.2
1127	Tin ores	- 2.1	- 3.1	- 2.3
1128	Uranium ores	- 2.6	- 2.3	- 1.7
1129	Non-ferrous metal ores nec	- 2.7	- 2.8	- 2.1
	Coal, oil and gas			
1201	Black coal	- 1.6	- 2.2	- 1.7
1202	Brown coal	- 1.6	- 1.5	- 1.1
1300	Crude oil and natural gases	- 1.9	- 1.5	- 1.1
	Other minerals			
1401–1505	Other minerals	- 2.8	- 2.7	- 2.0
	Services to mining			
1611, 2	Petroleum and mineral exploration (own account)	- 10.9	- 9.1	- 7.2
1620	Mining and exploration services nec	- 4.1	- 3.0	- 2.4
	Total mining	**- 2.5**	**- 2.4**	**- 1.8**

a Preliminary estimates.
b Projections.
Source: Commission estimates

Appendix 11
Assistance to manufacturing

Estimates of assistance to manufacturing industries for the period 1986–87 to 1988–89 and preliminary estimates for 1989–90 are presented in this appendix. The 1989–90 estimates represent the midpoint of the phased reductions in tariff assistance that flowed from the May 1988 Economic Statement. Hence it is opportune to compare these midpoint estimates of manufacturing assistance with those measured before phasing commenced and those expected at the end of the phasing — referred to as mid-1990s.

The average effective assistance to manufacturing of 19 per cent in 1987–88 is expected to decline to 12 per cent at the end of tariff phasing in the mid-1990s. This represents a decline of over one-third on 1987–88 levels. Based on the Commission's preliminary estimates, the average effective rate of assistance to the sector in 1989–90 declined to 16 per cent; a reduction of 3 percentage points on 1987–88 levels.

Methodology

The estimates reported below are restricted to assistance provided by the Commonwealth Government and include tariffs on outputs and material inputs, bounties, quantitative import restrictions, export incentives and local content schemes. The estimates do not cover the entire range of assistance provided by the Commonwealth. Some forms of assistance are difficult to quantify due to a number of factors, including data limitations. Forms of assistance not incorporated in the estimates include anti-dumping procedures, tariff penalties on capital items used by the manufacturing sector, and most of the alternative assistance measures reported in appendix 8. In addition, no allowance has been made for the possibility that prices currently paid for government provided services, such as electricity, would change in a more competitive environment.

In calculating the nominal and effective rates of assistance, the Commission seeks to apply a consistent framework to analyse a diverse range of government policies and programs. These estimates provide an indication of the extent to which government intervention influences producers' and consumers' decisions.[1]

The estimates for 1986–87 to 1989–90 and projected estimates for the mid-1990s are now based on a new method of incorporating the effects of by-laws, commercial tariff concession orders and duty draw-back. As a result, some previously published nominal rates of assistance on materials and effective rates have been revised.

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1 As well as being a useful measure for summarising the differential incentives provided industries by the assistance structure, a ranking of nominal and effective rates across industries can provide a broad indication of the potential size of the economic costs to the community of assistance. Details of the methodology used and the measures of nominal and effective rates are in IAC (1985b, 1987a).

Information on assistance to manufacturing is summarised in the following tables:

- tariff quotas for textiles, clothing and footwear current at 15 August 1990 (table A11.1, pages 153–5);
- tender sale premiums for import quota entitlements, by quota category: 1986 to 1991 (table A11.2, pages 156–9);
- assistance to manufacturing, by form: 1986–87 to 1989–90 and projected mid-1990s (table A11.3, page 160);
- average nominal rates of assistance, manufacturing industries: 1986–87 to 1989–90 and projected mid-1990s (table A11.4, pages 161–74);
- average effective rates of assistance, manufacturing industries: 1986–87 to 1989–90 and projected mid-1990s (table A11.5, pages 175–83);
- standard deviations for nominal and effective rates of assistance, manufacturing subdivisions: 1986–87 to 1989–90 and projected mid-1990s (table A11.6, pages 184–5); and
- subsidy equivalents, tax on materials and consumer tax equivalents, manufacturing subdivisions: 1988–89 and 1989–90 (table A11.7, pages 186–7).

For the manufacturing sector as a whole, the nominal rate of assistance on outputs and the nominal rate on materials in 1989–90 declined slightly from their 1988–89 levels of 10 per cent and 6 per cent, respectively. The effective rate declined from 17 per cent in 1988–89 to 16 per cent in 1989–90. This decline in effective rates continues the trend evident since 1984–85 (figure A11.1).

The 1989–90 assistance levels are roughly the midpoint in the general tariff phasing announced in the May 1988 Economic Statement. The mid-1990s estimates reflect the final phased rates. Under the tariff reduction program announced in the May Statement, tariff rates above 15 per cent are being reduced in annual steps to 15 per cent, while rates of 15 per cent or less (but above 10 per cent) are being reduced to 10 per cent. For the textile, clothing and footwear (TCF) industries, quotas are being phased out by July 1995, with protection for these quota items being provided by tariffs of 55 per cent for apparel and certain textiles, 45 per cent for footwear and 40 per cent for fabrics. The mid-1990s estimates also include the changes to the passenger motor vehicles (PMV) plan announced in April 1988. Tariffs on passenger motor vehicles are reducing to 35 per cent by January 1992. The mid-1990s estimates reported in this appendix are revisions to those the IAC published in its 1987–88 Annual Report.[2]

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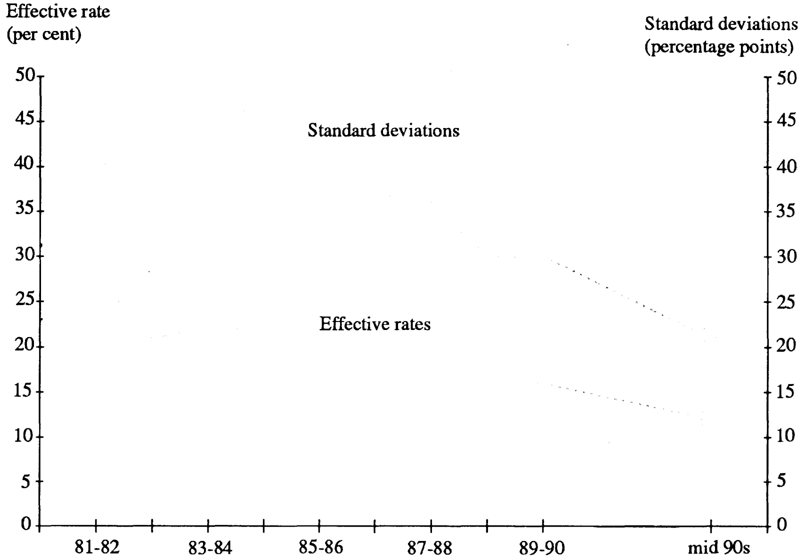
2 The revised estimates use the finalised version of the concordance to the Harmonized Tariff; only a preliminary concordance was available at the time of the original estimates. The revised estimates also incorporate changes in assistance announced subsequent to the May 1988 Economic Statement and some revisions in the measurement of certain forms of assistance.

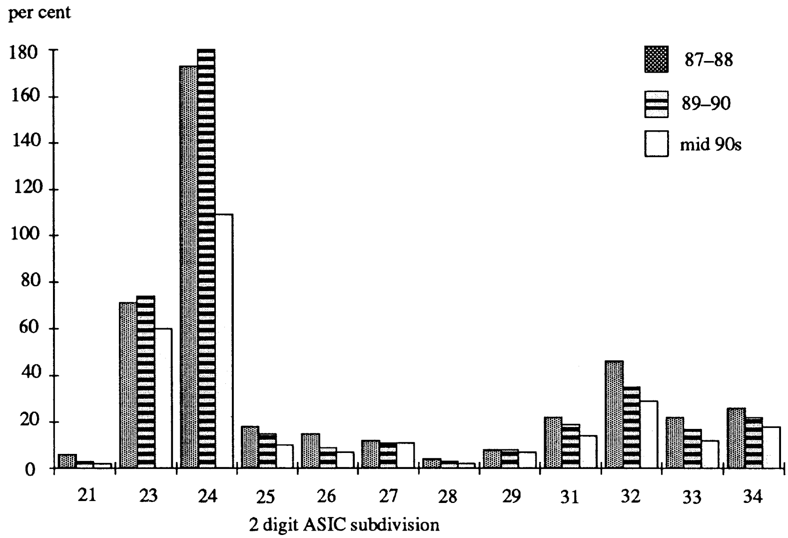
Figure A11.1
Average effective rates of assistance and standard deviations, for the manufacturing sector, 1980–81 to 1989–90 and projected mid-1990s



Nominal rates on outputs and materials in 1989–90 were generally at levels falling midway between those applying in 1987–88 and those that will apply in the mid-1990s (table A11.4). The only exceptions at the industry subdivision level were: Textiles (ASIC 23); Clothing and footwear (ASIC 24); and Transport equipment (ASIC 32). The only 4-digit ASIC industries outside these three subdivisions for which the nominal rate on outputs or materials are projected to be higher in the mid-1990s than in 1989–90 are in the Food beverages and tobacco subdivision (ASIC 21). This reflects the influence on processing industries of domestic marketing arrangements for agricultural commodities, where the average level of assistance projected to apply depends not only on the level of world prices, but also on the volume of production. The mid-1990s estimates for these industries are based on projected assistance changes with 1987–88 volumes of agricultural production and world prices, whereas the 1988–89 and 1989–90 estimates reflect 1988–89 volumes of agricultural production and world prices.

At the industry subdivision level, a relatively small proportion of manufacturing is estimated to receive high effective assistance. Although this proportion will become smaller with phasing, two outliers will remain — Textiles, and Clothing and footwear (figure A11.2).

Figure A11.2
Effective rates of assistance to manufacturing: 1987–88, 1989–90 and the mid-1990s



21	Food, beverages and tobacco	28	Non-metallic mineral products
23	Textiles	29	Basic metal products
24	Clothing and footwear	31	Fabricated metal products
25	Wood, wood products and furniture	32	Transport equipment
26	Paper, paper products, printing and publishing	33	Other machinery and equipment
27	Chemical, petroleum, and coal products	34	Miscellaneous manufacturing

Between 1988–89 and 1989–90 the significant changes in effective rates of assistance at the subdivision level were:

- an increase of 13 percentage points to 183 per cent in the effective rate for Clothing and footwear (ASIC 24);
- a decline of 4 percentage points for Transport equipment (ASIC 32)
- a decline of 3 percentage points for Paper, paper products, printing and publishing (ASIC 26); and
- declines of 2 percentage points for Wood, wood products and furniture (ASIC 25), Fabricated metal products (ASIC 31), Other machinery and equipment (ASIC 33) and Miscellaneous manufacturing (ASIC 34).

TCF industries

The very high and increasing assistance levels for some industries within Textiles and Clothing and footwear are the result of import quotas. The 1989–90 estimates for the quota-protected activities are based on the premiums tendered in 1989 for 1990–91 quota entitlements. The premiums increased — in some cases dramatically — for many quota categories (table A11.2). Assistance estimates in 1990–91 will incorporate the premium bids announced in August 1990 for 1991–92 quota entitlements. Rates of assistance for 1990–91 are expected to fall, as the tender result showed premium reductions (some substantial) for nearly all quota categories. Despite a significant reduction in premiums for next year's entitlements, premiums were still higher than those paid for 1989 entitlements in some tender categories — for example, certain children's wear and some footwear categories.

The significant reductions in the latest tender premiums largely reflect the current depressed market conditions but are also influenced by an expansion of tender pool sizes and reductions in out-of-quota penalty rates. Reductions in out-of-quota duty rates commenced on 1 March 1990 and an increasing proportion of higher value goods are being imported out of quota. As out-of-quota duty rates reduce to zero by 1 July 1995, estimates of assistance in the mid-1990s are based on a tariff-only regime. The base quota allocation for 1991–92 will be the last under the current TCF assistance plan. From March 1992 importers will no longer receive a base allocation on the basis of historical import performance and instead will have to bid for their quota requirements or import out of quota and pay the penalty duty.

The estimates for TCF industries have been influenced also by the new method of measuring the effects of by-laws. This reduced the estimate of the tariff penalty on materials for a number of industries and, as a consequence, there were some significant increases in previously reported effective rates. In recent years policy by-laws have become more important to the TCF industries, particularly for yarns. This had not been fully captured using the previous method of measuring the cost-saving effect of by-laws.

Transport equipment

Following a mid-term review of the PMV plan in April 1988, quantitative import restrictions on passenger motor vehicles were removed and the tariff on passenger motor vehicles was reduced from 57.5 per cent to 45 per cent. The tariff is scheduled to phase down by 2.5 percentage points each year to 35 per cent on 1 January 1992. The current tariff rate is 40 per cent. In addition, the local content scheme which assisted domestic component production was abolished on 1 January 1989. There is now no binding constraint on the value of components that passenger vehicle producers can source from imports. Plan producers receive an automatic duty free entitlement equal to 15 per cent of the value of their vehicle production. Subject to export facilitation, imports of components in excess of 15 per cent are now subject to the same tariff rate applying to passenger motor vehicle imports. Estimates previously published by the Commission had been based on the average price disadvantage on components used as original equipment under the local content plan.[3] In the absence of more reliable data, the average price disadvantage was taken as 10 per cent for the years 1986–87 to 1988–89.

The estimates for 1988–89 have been revised since publication in the 1988–89 IAC Annual Report and are now based, for the second half of the year, on the relevant tariff protection. The 1989–90 and subsequent estimates are wholly based on the new method.[4] The effect of this revision has been to increase measured output assistance and the effective rates for the Motor vehicle parts industries (ASIC 3233 and 3234) and assistance on materials for the industry assembling passenger motor vehicles (ASIC 3231). The increase in the estimated nominal rate on materials for ASIC 3231 led to a large reduction in the effective rate for this industry.

Other industries

The tariff phasing program is reflected in reduced assistance in 1989–90, particularly for the following industry subdivisions: Wood, wood products and furniture; Paper, paper products, printing and publishing; Fabricated metal products; Other machinery and equipment; and Miscellaneous manufacturing. In the case of Other machinery and equipment, the reduction also includes the effects of terminating bounty assistance on certain types of agricultural equipment.

At the individual industry level there was a very large increase in the effective rate for the Photographic and optical goods industry (ASIC 3341). The rate increased from 4 per cent in 1988–89 to 12 per cent in 1989–90. This increase is due mainly to the Government's decision to pay Kodak Australasia $36 million from 1 January 1990 under the photographic film bounty.[5] The 1989–90 estimate includes the first payment of $6 million. The assistance estimates for 1990–91 and 1991–92 are expected to show a further increase with a budget allocation of $12 million a year. The mid-1990s estimate of 9 per cent incorporates the last $6 million payment in 1992–93.

The only other significant change in assistance between 1988–89 and 1989–90, at the individual industry level, was a reduction of nearly 5 percentage points in the nominal rate on outputs for the Beer industry (ASIC 2186). The reduction from 7 per cent to 2 per cent reflected the removal of the discriminatory sales tax in the 1988–89 Budget. The rates of over 30 per cent for 1986–87 and 1987–88 are based on a full year's operation of the tax whilst the 1988–89 rate is based on the tax being in place for less than two months. The effective rate has fallen from 87 per cent in 1987–88 to minus 2 per cent in 1989–90.

Some previously published nominal rates on materials for industries that are intensive users of excisable fuels have been revised as a result of using more

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3 For further details on the measurement of assistance to component production see IC (1990c, app A.1).

4 Therefore, at the individual industry level, care should be taken when comparing 1988–89 and 1989–90 estimates with those for earlier years.

5 For further details on the bounty and its eligibility conditions see appendix 7.

representative price data for refined petroleum products. The revised fuel treatment generally resulted in the estimate of the cost penalty imposed on user industries being lowered. The industries most affected are in the mineral processing area, especially ASIC industry group 295. The estimates of assistance to industries in this group, and in particular Alumina (ASIC 2953), were also affected by the changes in the way the cost reducing effects of duty draw-back have been measured. The previous method had overestimated the extent of this cost saving. The net result was a lowering of previously published effective rates for Alumina and ASIC industry group 295.

Gross and net subsidy equivalents, tax on materials, and consumer tax equivalents for 1988–89 and preliminary estimates for 1989–90 are shown in table A11.7. These estimates measure the income transfers throughout the community from the assistance structure, making some people better off and others worse off. As such, they do not measure the economic (or welfare) costs to the community from assistance — such costs will be smaller and depend on the extent to which assistance misallocates resources and consumption patterns by distorting the decisions of producers and consumers.

Disparities in assistance

The efficient use of resources is to a large extent determined by differences in levels of assistance between and within industries (disparities), rather than the average level of assistance. Disparities in assistance between manufacturing industries indicate how the assistance structure impacts on resource use within the sector. The larger the disparities in effective assistance levels, the higher the potential for resources to be channelled into activities which do not maximise economic welfare. In addition, wide disparities in nominal rates for similar consumer goods indicate the potential for losses in consumption efficiency.

The Commission uses the standard deviation as a measure of disparities in assistance between ASIC industries. The higher the standard deviation measured, the larger the variability in rates of assistance between industries.

At the sectoral level, manufacturing assistance has been and continues to be highly variable between industries (table A11.6). For total manufacturing, disparities in nominal rates of assistance have remained relatively constant since 1986–87 — falling by only 1 percentage point to 12 percentage points in 1987–88, and remaining at that level in 1989–90. The standard deviation for nominal rates is expected to decline to 9 percentage points by the mid-1990s.

Disparities in the effective rate of assistance for total manufacturing are significantly higher than disparities in nominal rates. Disparities have been declining steadily since they peaked in 1984–85 at 48 percentage points. Before the introduction of the current tariff phasing arrangements, in 1987–88, the standard deviation for manufacturing effective rates was 36 percentage points. In 1989–90, the midpoint in phased reductions, the equivalent figure was 31 percentage points. By the mid-1990s, disparities in effective assistance are expected to fall to 21 percentage points (figure A11.1).

Within some industry subdivisions, disparities in assistance are particularly high and will continue to be high after phasing has been finalised. The highest disparities for effective rates of assistance are in the Clothing and footwear subdivision, with a standard deviation of 64 percentage points in 1989–90 projected to decline to 32 percentage points by the mid-1990s. Disparities in the Textiles industry subdivision are estimated at 62 percentage points in 1989–90 and are expected to fall to 43 percentage points in the mid-1990s. Disparities in the Transport equipment industry subdivision are estimated at 35 percentage points in 1989–90 and are expected to fall by only 2 percentage points in the mid-1990s. The Textiles and the Clothing and footwear subdivisions also have the highest level of dispersion in nominal rates in 1989–90. In the mid-1990s the projected level of dispersion in nominal rates for Textiles is almost double that of the next highest industry subdivision (table A11.6).

Table A11.1
Tariff quotas for textiles, clothing and footwear current at 15 August 1990

Quota category	*Description*	*Annual level of restriction ('000)*[a] *1990*[b]	*1991*[b]	*Percentage change in 1991 over 1990*	*Additional duty for out-of-quota imports from 1.3.91*[c]
501	Knitted or crocheted coats, jumpers, cardigans, sweaters, and the like, tube tops	19 746.9 garments	20 370.1 garments	+ 3.2	$3 per garment
502	Knitted or crocheted shirts, blouses and other tops	21 022.1 garments	21 863.0 garments	+ 4.0	$1.50 per garment
503	Woven shirts and blouses	12 775.0 garments	13 231.1 garments	+ 3.7	$2.30 per garment
504 & 505	Woven coats and jackets, sets of mens garments, including suits	1 877.2 garments	1 957.1 garments	+ 4.3	$10 per garment (504) $13.30 per garment (505)
506	Leather coats and jackets	61.2 garments	64.6 garments	+ 5.5	45% vfd
507	Trousers, jeans and overalls	13 054.9 garments	13 642.9 garments	+ 4.5	$3.10 per garment
508 & 509	Shorts and male swimwear, women's, girls' and infants' swimwear	8 237.8 garments	8 929.2 garments	+ 8.4	$1.55 per garment (508) $3.30 per garment (509)
511 & 512	Dresses, dressing gowns, adult nightdresses and nightshirts and the like, men's woven pyjamas, other outergarments and other sleepwear	26 971.0 garments	22 405.8 garments	- 16.9	$3.30 per garment (511) $0.80 per garment (512a) $2.80 per garment (512b)
510	Certain children's wear	19 605.4 garments	25 946.7 garments	+ 32.3	$0.75 per garment

Quota category	Description	Annual level of restriction ('000)[a] 1990[b]	1991[b]	Percentage change in 1991 over 1990	Additional duty for out-of-quota imports from 1.3.91[c]
513 & 514	Other undergarments for boys and panties for women, girls and infants, other undergarments for women, girls and infants	24 022.4 garments	26 195.6 garments	+ 9.1	$0.35 per garment (513) $1.50 per garment (514)
515 & 516	Brassieres, corsets, girdles and the like	5 459.0 garments	5 653.1 garments	+ 3.6	$1.05 per garment (515) $1.45 per garment (516)
517	Garments of plastic materials of rubber, or the like[d]	$10 837.5 vfd	$10 846.8 vfd	+ 0.1	45% vfd
518	Tights and pantyhose less than 4.4 tex	22 209.4 pairs	25 985.1 pairs	+ 17.0	$0.10 per pair
519	Socks and the like; tights and pantyhose 4.4 tex or more	18 007.9 pairs	19 448.6 pairs	+ 8.0	$0.25 per pair
520	Footwear with leather uppers	9 524.9 pairs	10 001.1 pairs	+ 5.0	$7 per pair
521	Other footwear	21 504.3 pairs	22 041.8 pairs	+ 2.5	$4 per pair
522	Parts for footwear[d]	$5 177.0 vfd	$5 410.6 vfd	+ 4.5	45% vfd
523	Terry towelling, towels, babies' napkins and the like	7 341.0 sq m	7 695.5 sq m	+ 4.8	$1.10 per sq m
524	Bed linen, including quilt covers and ruffles[d]	$28 494.8 vfd	$28 495.6 vfd	..	30% vfd

Quota category	Description	*Annual level of restriction ('000)*[a] *1990*[b]	*1991*[b]	*Percentage change in 1991 over 1990*	*Additional duty for out-of-quota imports from 1.3.91*[c]
525	Fabrics suitable for use as bed sheeting, or in making up of bed linen	30 974.1 sq m	30 974.1 sq m	–	$1 per sq m
526	Woven fabric of man-made fibres	21 886.9 sq m	21 887.0 sq m	..	$0.70 per sq m

– Nil.

.. Change between - 0.05 per cent and 0.05 per cent.

vfd Value for duty.

a Quota levels apply for the 12 month period from 1 March to 28 February.

b Imports of footwear and clothing from New Zealand are not subject to quota.

c Under the TCF plan, duty payable on out-of-quota imports is being phased down to provide tariff-only protection against imports from July 1995.

d These quotas are defined in value terms. Before March 1990, the real value of the quota was maintained over time by an adjustment based on exchange rate and import price movements. From 1 March 1990 value based quotas will be adjusted by the change in the appropriate division of the ABS import price index. Accordingly, there will be no special above ceiling allocations granted for the purposes of exchange rate adjustments for 1990–91 and future quota periods. This adjustment mechanism means that the percentage changes in restriction levels between 1990 and 1991 do not necessarily represent a change in the quantum of imports which may enter during the two years. Footwear qualifying for quota exemption, ie footwear with a customs value of less than $A1.50 a pair, could become subject to quota due to exchange rate variations. If this occurs a special issue of base quota may be made. The exchange rates to be used as adjustment factors for this purpose are published in Australian Customs Notice 90/80.

Sources: Australian Customs Notices, various.
Department of Industry, Technology and Commerce, News Releases, various.

Table A11.2

Tender sale premiums for import quota entitlements, by quota category: 1986 to 1991

(per cent)

Tender categories			*Base categories*		*Base duty rates* [a]		*Tender sale premiums for*					
Current (1989 –1995)	*Previous (1982 –1989)*	*Description*	*Current (1989 –1991)* [b]	*Previous (1982 –1989)*	*Current (1989 –1995)*	*Previous (1982 –1989)*	*1986*	*1987*	*1988* [c]	*1989*	*1990*	*1991*
Textiles, clothing & footwear[d]												
601	201	Knitted or crocheted coats, jumpers cardigans, sweaters and the like, tube tops	501	101	60	50	41	21	10	18	23	4
602	202	Shirts and blouses and knitted or crocheted tops[e]	502 503	102 103	60	50	40	97	na	na	na	na
604	203	Woven coats and jackets; sets of men's garments, including suits	504 505	104 106	60	50	22	20	30	44	21	0
606	204	Trousers, jeans and overalls	507	107	60	50	10	5	12	20	33	20
607	205	Shorts and male swimwear	508	108	60	50	0[f]	0[f]	0[f]	22	50	20
605	206	Leather coats and jackets	506	105	60	50	0[f]	0[f]	17	35	40	8
608	207	Women's, girls' and infants' swimwear	509	109	60	50	60	20	0[f]	0[f]	0[f]	0[f]
612	208	Brassieres; corsets, girdles and the like[g]	515 516	116 117	60	50	130	81	0[f]	31	36	29

Tender categories			Base categories		Base duty rates [a]		Tender sale premiums for					
Current (1989 –1995)	*Previous (1982 –1989)*	*Description*	*Current (1989 –1991)* [b]	*Previous (1982 –1989)*	*Current (1989 –1995*	*Previous (1982 –1989)*	*1986*	*1987*	*1988* [c]	*1989*	*1990*	*1991*
610	209	Men's woven pyjamas[e]	512	112	na	50	31	100	na	na	na	na
609	210	Certain children's wear	510	111	60	50	46	0	1	2	15	15
613	211	Garments of plastic material, of rubber, or the like[h]	517	118	60	50	34	2	5	0[f]	0[f]	0[f]
614	212A	Tights and pantyhose less than 4.4 tex	518	119	60	50	51	60	76	77	0[f]	0[f]
615	212B	Socks and the like; tights and pantyhose 4.4 tex or more	519	120	60	50	25	6	0[f]	0[f]	20	17
611	214	Other undergarments for men and boys; other undergarments for women, girls, and infants	513 514	114 115	60	50	19	65	37	31	35	31
616	215	Footwear with leather uppers[i]	520	121	50	40	0[f]	31	23	45	50	23
617	216	Other footwear[i,j]	521	122	50	40	0[f]	30	25	20	40	36
618	217	Parts for footwear[k]	522	123	40	40	59	51	23	13	26	15
619	218	Terry towelling, towels, babies' napkins and the like	523	124	60	50	40	30	3	25	29	20
620	219	Bed linen, including quilt covers and bed ruffles	524	125	60	40	10	20	16	22	25	20

Tender categories			Base categories		Base duty rates [a]		Tender sale premiums for					
Current (1989 –1995)	*Previous (1982 –1989)*	*Description*	*Current (1989 –1991)* [b]	*Previous (1982 –1989)*	*Current (1989 –1995)*	*Previous (1982 –1989)*	*1986*	*1987*	*1988* [c]	*1989*	*1990*	*1991*
621	222	Fabric suitable for use as bed sheeting and the like, or in the making up of bed linen	525	128	40	0–40[l]	17	20	3	20	18	0[f]
622	223	Woven fabric of man-made fibres	526	129	40	40	40	23	32	40	40	7
602	224[e]	Knitted shirts and blouses	502	102	60	50	na	na	155	62	80	20
603	225[e]	Woven shirts and blouses	503	103	60	50	na	na	72	70	70	28
610	226[e]	Dresses, other outerwear, pyjamas	511 512 512	110 112 113	60	50	na	na	1	12	21	10
Motor vehicles												
	268	Motor cars, station wagons and four-wheel-drive vehicles[m]		168		57.5	24	0	0	na[n]	na[n]	na[n]

na Not applicable.

a Base duty rate applying to non-handicraft entries only. Handicraft entries attract a zero base duty rate. For current base duty rates, the rates shown for all categories except 621 and 622 include the 5 percentage point surcharge to base quota imports announced in the May 1988 Economic Statement.

b Under the current TCF plan, 1991 is the last year in which base quota will be allocated. From 1992 all quota will be subject to tender.

c In order to facilitate a change-over in the quota year from the calendar year basis used under the previous plan to a year commencing 1 March under the current plan, 1988 tender quota entitlements for textiles, clothing and footwear imports extended from 1 January 1988 to 28 February 1989.

d Imports of footwear from New Zealand were removed from quota from 1 March 1989. Imports from New Zealand of clothing under categories 601 to 615 were removed from quota from 1 July 1989. Other TCF imports from New Zealand have been free of quota since 1 March 1990.

e From 1 January 1988, tender category 202 (Shirts and blouses) was replaced by two separate categories: 224 (Knitted shirts and blouses) and 225 (Woven shirts and blouses). Also from that date the existing tender categories 209 (Men's woven pyjamas) and 213 (Dresses, dressing gowns, etc) were combined into one category, 226 (Dresses, other outerwear, pyjamas).

f The first auction of quota entitlements in these categories failed to clear the available tender pool and, as a result, there was no tender premium. When this has occurred the residual portion of the quota pool has been disposed of by a ballot between successful tenderers with an attached tender premium of zero.

g Brassiere back replacements of tender category 612, tariff item 6212.90 were removed from quota and are now dutiable under 6212.90.90 at 25 per cent, effective from 1 March 1989.

h Anti-radiation suits, anti-contamination suits, and similar protective garments of tender category 613, tariff items 3926.20.20, 4015.90.20, 6113.00.90, 6210.40.90 and 6210.50.90 were removed from quota and new classifications 3926.20.21, 4015.90.21, 6113.00.20, 6210.40.30 and 6210.50.30 introduced which are dutiable at a rate of 15 per cent, effective from 1 March 1989.

i The customs value criteria which determine whether particular footwear products are subject to quota (and the category within which they fall) are adjusted periodically to ensure that the basic character of the product mix covered by each quota category is maintained over time. From 1 March 1989 category 215 incorporates all footwear items with leather uppers having a customs value of $1.50 or more per pair. In the same period, category 216 consists of non-leather footwear items. The description was formerly 'Footwear with leather uppers, or having a customs value of not less than $11.00 per pair'. Because of the change in description, from 1 March 1989 the figures are not strictly comparable.

j Tariff item 6404.11.00 of tender category 617 was split to remove imports of ski-boots and cross-country ski footwear from quota which are now free of duty, effective from 1 March 1989.

k Tariff item 6406.99.90 of tender category 618 has been split to remove metal parts of footwear from quota which are now dutiable at 15 per cent, effective from 1 March 1989.

l Under the previous plan base quota category 128 covered three tariff classifications in the Customs Tariff each with different base duty rates: 55.09.611 had a duty rate of 22.5 per cent; 55.09.612 had a duty rate of 40 per cent or, if lower, $0.25 per sq. metre; and 55.09.613 had a zero base duty rate.

m These results refer to the auction of one-year tender quota entitlements. The corresponding premium bids at the auction of four-year tender quota entitlements were 11 per cent for entitlements commencing in 1986, 3 per cent for entitlements commencing in 1987 and zero for entitlements commencing in 1988.

n Imports of motor vehicles ceased to be subject to quota from 13 April 1988.

Sources: Various Australian Customs Notices and information supplied by the Australian Customs Service.

Table A11.3
Assistance to manufacturing, by form: 1986–87 to 1989–90 and projected mid-1990s[a]
($ million)

	1986–87	*1987–88*	*1988–89*	*1989–90 [b]*	*mid 90s*
Assistance to outputs					
Tariffs[c]	10 762	11 284	10 747	10 644	8 725
Quantitative import restrictions[d]	679	764	516	625	0
Bounties[e]	188	198	158	142	98
Export incentives[e]	148	159	177	188	188
Assistance to materials					
Tariffs[f]	4 444	4 467	4 338	4 563	3 811
Quantitative import restrictions[d]	263	292	193	133	0
Excise taxes	109	111	105	109	109

a Figures are in current prices with mid-1990s being based on 1989–90 prices. Some estimates for 1986–87 to 1988–89 have been revised since they were published in the IAC 1988–89 Annual Report. The figures for assistance to outputs and materials are respectively, the sum of the gross subsidy equivalents and the tax on materials for individual industries, classified according to form of assistance. The summation of these amounts across industries will exceed the total for the sector due to the outputs of many industries being used by other industries as intermediate inputs.

b Preliminary estimates.

c Includes relatively minor amounts of assistance from domestic pricing arrangements for certain agricultural commodities and discriminatory sales taxes in some years.

d The estimates for 1986–87 to 1988–89 include assistance provided to producers of motor vehicle components by the local content provisions of the PMV plan. These estimates measure the full extent by which the local content scheme raised domestic prices of components above prevailing world prices. Due to a revision in the Commission's treatment of local content provisions, the estimates presented in this table are not comparable with those presented before the IAC's 1987–88 Annual Report. The PMV local content requirement was abolished on 1 January 1989.

e The estimates presented in this table do not represent the actual bounty and export incentive payments in each year. The estimates measure the assistance afforded by the current rates of bounty and export incentives in each year using fixed 1983–84 production patterns.

f Includes relatively minor amounts of assistance from domestic pricing arrangements for certain agricultural commodities. Figures are net of the savings from concessional entry of imported materials under certain policy by-laws, commercial tariff concession orders, duty drawback and by-law for exports.

Source: Commission estimates.

Table A11.4

Average nominal rates of assistance[a], manufacturing industries: 1986–87 to 1989–90 and projected mid-1990s[b]

(per cent)

Industry[c]		*Average nominal rate on outputs[d]*					*on materials[e]*				
ASIC code	*Description*	*1986 –87*	*1987 –88[f]*	*1988 –89*	*1989 –90[g]*	*mid 90s*	*1986 –87*	*1987 –88[f]*	*1988 –89*	*1989 –90[g]*	*mid 90s*
FOOD, BEVERAGES AND TOBACCO											
2115	Meat (except smallgoods or poultry)	0.1	0.2	0.1	0.1	0.1	0.4	0.6	0.3	0.3	0.3
2116	Poultry[h]	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.8	0.7	0.3
2117	Bacon, ham and smallgoods nec	4.5	4.9	4.2	4.1	4.0	1.1	1.3	0.9	0.8	0.7
211	**Meat products[h]**	**0.6**	**0.7**	**0.6**	**0.6**	**0.6**	**0.5**	**0.7**	**0.4**	**0.4**	**0.3**
2121	Liquid milk and cream[h]	19	16	11	11	14	27	23	16	16	21
2122	Butter[h]	32	31	19	19	17	38	36	22	22	20
2123	Cheese[h]	25	14	10	10	9.0	38	22	16	16	14
2124	Ice cream and frozen confections[h]	11	8.0	4.8	4.8	4.1	57	45	29	28	27
2125	Milk products nec[h]	27	20	14	14	13	61	45	32	32	30
212	**Milk products[h]**	**22**	**17**	**12**	**12**	**12**	**36**	**28**	**19**	**19**	**20**
2131	Fruit products[h]	20	12	11	11	7.2	14	10	12	12	7.8
2132	Vegetable products[h]	5.1	6.2	6.7	6.6	6.2	8.1	7.1	5.9	5.3	5.1
213	**Fruit and vegetable products[h]**	**11**	**8.6**	**8.5**	**8.4**	**6.6**	**11**	**8.4**	**8.8**	**8.3**	**6.3**
214	**Margarine and oils and fats nec**	**6.8**	**6.5**	**6.1**	**6.3**	**6.1**	**4.4**	**4.4**	**3.5**	**3.3**	**3.2**
2151	Flour mill products[h]	2.4	1.4	0.3	0.3	0.1	11	2.9	2.6	2.5	0.3
2152	Starch, gluten and starch sugars	4.1	4.6	4.0	3.3	2.1	1.8	1.9	0.5	0.5	0.4
2153	Cereal foods and baking mixes[h]	11	12	13	13	11	21	23	23	23	19
215	**Flour mill and cereal food products[h]**	**6.6**	**6.4**	**6.2**	**6.2**	**5.1**	**14**	**10**	**10**	**10**	**7.5**

Industry[c]		Average nominal rate on outputs[d]					on materials[e]				
ASIC code	*Description*	*1986–87*	*1987–88*[f]	*1988–89*	*1989–90*[g]	*mid 90s*	*1986–87*	*1987–88*[f]	*1988–89*	*1989–90*[g]	*mid 90s*
2161	Bread[h]	0.1	0.1	0.1	0.1	0.1	5.0	4.5	3.4	3.1	3.0
2162	Cakes and pastries[h]	0.3	0.3	0.3	0.3	0.3	12	9.7	7.6	7.5	7.2
2163	Biscuits[h]	1.8	5.2	8.5	8.5	8.5	10	11	8.2	7.7	8.4
216	**Bread, cakes and biscuits[h]**	**0.5**	**1.4**	**2.1**	**2.1**	**2.1**	**7.8**	**7.2**	**5.5**	**5.2**	**5.2**
2171	Raw sugar)	11	11	8.4	8.5	9.4	19	18	14	14	15
2176	Food products nec)[h,i]										
2173	Confectionery and cocoa products[h]	16	17	17	16	13	11	11	8.2	7.8	8.9
2174	Processed seafoods	0.9	0.8	0.7	0.7	0.7	0.8	0.9	0.6	0.6	0.5
2175	Prepared animal and bird foods[h]	1.2	0.7	1.8	1.8	0.1	2.0	1.9	2.0	1.9	0.9
217	**Other food products[h]**	**8.0**	**8.3**	**7.1**	**7.0**	**6.9**	**10**	**10**	**8.1**	**8.0**	**8.2**
2185	Soft drinks, cordials and syrups[h]	11	11	11	10	8.0	12	12	10	9.6	9.7
2186	Beer[h]	32	36	6.5	1.7	1.7	5.9	5.7	4.4	4.0	3.8
2187	Malt	0.6	0.6	0.7	0.7	0.7	0.3	1.1	0.2	0.2	0.2
2188	Wine and brandy[h]	18	18	16	16	13	12	13	15	13	9.2
2189	Alcoholic beverages nec[h]	8.0	8.5	8.5	8.5	5.9	26	18	6.2	6.5	7.9
218	**Beverages and malt[h]**	**19**	**21**	**9.5**	**7.3**	**5.9**	**8.8**	**8.6**	**7.7**	**7.1**	**6.5**
219	**Tobacco Products[h]**	**8.8**	**7.4**	**7.6**	**6.5**	**6.5**	**9.4**	**11**	**20**	**19**	**9.3**
21	**FOOD, BEVERAGES AND TOBACCO[h]**	**8.1**	**7.6**	**5.4**	**5.1**	**4.9**	**9.5**	**8.1**	**6.5**	**6.3**	**6.0**

Industry [c]		Average nominal rate on outputs [d]					on materials [e]				
ASIC code	*Description*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*
TEXTILES											
2341	Cotton ginning[h]	15	5.1	7.7	7.7	5.1	16	5.9	8.5	8.5	5.7
2342	Wool scouring and top making	–	–	–	–	–	–	–	–	–	–
2343	Man-made fibres and yarns	34	35	37	36	31	8.6	6.3	3.7	3.5	3.6
2344	Man-made fibre broadwoven fabrics	49	53	60	60	37	7.0	6.1	5.2	4.6	4.0
2345	Cotton yarns and broadwoven fabrics	37	40	44	44	35	12	9.7	12	12	10
2346	Worsted yarns and broadwoven fabrics	20	23	27	27	24	3.1	2.7	1.0	0.9	0.9
2347	Woollen yarns and broadwoven fabrics	18	20	22	22	22	3.7	2.9	0.9	0.6	0.3
2348	Narrow woven and elastic textiles	25	25	24	23	23	6.6	4.9	2.9	2.6	1.9
2349	Textile finishing	37	43	51	50	33	18	17	17	16	13
234	**Textiles fibres, yarns and woven fabrics[h]**	**21**	**22**	**25**	**25**	**18**	**7.6**	**5.3**	**5.4**	**5.2**	**4.1**
2351	Household textiles	36	34	43	43	34	18	22	26	25	12
2352	Textile floor coverings	35	35	35	33	31	7.1	9.4	11	11	10
2353	Felt and felt products	17	16	15	15	15	4.9	3.8	1.9	1.1	0.2
2354	Canvas and associated products nec	18	22	21	21	20	22	26	29	28	17
2355	Rope, cordage and twine	19	19	19	19	19	6.4	8.2	9.5	9.4	9.3
2356	Textile products nec	20	16	12	12	9.9	9.3	10	11	10	4.6
235	**Other textile products**	**27**	**27**	**27**	**26**	**24**	**11**	**13**	**15**	**15**	**9.9**
23	**TEXTILES[h]**	**23**	**24**	**26**	**25**	**20**	**8.5**	**7.4**	**8.1**	**7.7**	**5.7**

Industry [c]		Average nominal rate on outputs [d]					on materials [e]				
ASIC code	*Description*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*
CLOTHING AND FOOTWEAR											
2441	Hosiery	76	79	76	56	48	4.3	6.8	9.1	8.7	8.3
2442	Cardigans and pullovers	73	66	68	73	49	7.1	8.1	8.7	8.4	8.0
2443	Knitted goods nec	50	57	48	51	36	7.2	8.4	9.3	9.0	8.5
244	**Knitting mills**	**62**	**65**	**60**	**58**	**42**	**6.6**	**8.0**	**9.1**	**8.8**	**8.3**
2451	Mens trousers and shorts; work clothing	53	57	73	83	49	23	29	35	33	22
2452	Mens suits and coats; waterproof clothing	50	54	67	57	41	13	17	21	21	9.3
2453	Womens outerwear nec	56	71	66	72	47	19	25	30	29	15
2454	Foundation garments	103	45	68	71	44	22	11	25	21	10
2455	Underwear and infants clothing nec	98	95	84	90	49	18	21	24	23	17
2456	Headwear and clothing nec	35	33	31	33	25	18	20	22	20	17
245	**Clothing**	**64**	**67**	**67**	**72**	**44**	**19**	**23**	**28**	**26**	**16**
246	**Footwear**	**64**	**55**	**63**	**72**	**38**	**25**	**20**	**13**	**18**	**14**
24	**CLOTHING AND FOOTWEAR**	**64**	**64**	**65**	**68**	**43**	**17**	**19**	**21**	**21**	**14**

Industry [c]		*Average nominal rate on outputs* [d]					*on materials* [e]				
ASIC code	*Description*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*
WOOD, WOOD PRODUCTS AND FURNITURE											
2531	Log sawmilling	3.3	3.3	3.0	3.2	2.8	2.1	2.1	1.7	1.7	1.5
2532	Resawn and dressed timber	9.1	9.1	8.5	8.1	6.3	2.7	2.7	2.3	2.3	2.2
2533	Veneers and manufactured boards of wood	16	16	15	13	11	8.7	8.4	7.6	7.0	5.8
2534	Wooden doors	13	13	13	12	9.0	12	11	10	9.3	7.6
2535	Wooden structural fittings and joinery nec	12	12	11	11	8.2	8.4	8.4	7.8	7.3	6.2
2536	Wooden containers	6.2	6.2	5.7	5.3	4.3	3.6	3.7	3.2	3.2	2.9
2537	Hardwood woodchips	–	–	–	–	–	0.3	0.3	0.2	0.2	0.2
2538	Wood products nec	14	14	13	12	9.7	6.1	6.0	5.3	5.0	4.3
253	**Wood and wood products**	**9.4**	**9.3**	**8.7**	**8.1**	**6.5**	**5.8**	**5.8**	**5.2**	**4.9**	**4.2**
2541	Furniture (except sheet metal)	25	25	23	20	13	14	14	14	13	10
2542	Mattresses (except rubber)	7.0	6.9	5.8	5.8	5.5	15	15	14	14	10
254	**Furniture and mattresses**	**22**	**22**	**20**	**18**	**12**	**14**	**14**	**14**	**13**	**10**
25	**WOOD, WOOD PRODUCTS AND FURNITURE**	**14**	**14**	**12**	**11**	**8.2**	**8.8**	**8.7**	**8.1**	**7.7**	**6.3**

Industry[c]		*Average nominal rate on outputs*[d]					*on materials*[e]				
ASIC code	*Description*	*1986–87*	*1987–88*[f]	*1988–89*	*1989–90*[g]	*mid 90s*	*1986–87*	*1987–88*[f]	*1988–89*	*1989–90*[g]	*mid 90s*
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING											
2631	Pulp, paper and paperboard	9.4	9.3	8.1	6.7	6.8	3.9	3.1	1.6	1.3	1.2
2632	Paper bags (including textile bags)	20	21	20	16	13	14	14	12	10	9.8
2633	Solid fibreboard containers	21	20	19	15	13	7.1	7.6	6.8	6.5	6.0
2634	Corrugated fibreboard containers	21	21	19	15	13	13	13	11	9.5	9.3
2635	Paper products nec	21	20	17	14	12	9.1	8.7	6.8	5.8	5.7
263	**Paper and paper products**	**16**	**16**	**14**	**11**	**10**	**7.8**	**7.5**	**6.0**	**5.2**	**5.0**
2641	Publishing	0.3	0.2	0.2	0.2	0.1	0.8	0.6	0.7	1.1	0.5
2642	Printing and publishing	0.6	0.5	0.3	0.3	0.2	1.8	1.7	1.5	1.3	1.2
2643	Paper stationery	22	22	19	15	13	12	12	9.9	8.4	7.9
2644	Printing and bookbinding	21	17	11	8.9	7.3	11	10	8.7	7.5	7.1
2645	Printing trade services nec	2.4	2.3	0.3	0.2	0.2	9.5	9.1	8.0	7.8	6.1
264	**Printing and allied industries**	**10**	**8.6**	**6.2**	**4.9**	**4.1**	**7.6**	**7.2**	**6.2**	**5.4**	**5.0**
26	**PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING**	**12**	**11**	**9.0**	**7.2**	**6.2**	**7.7**	**7.4**	**6.1**	**5.3**	**5.0**

Industry [c]		Average nominal rate on outputs [d]					Average nominal rate on materials [e]				
ASIC code	*Description*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*
CHEMICAL, PETROLEUM AND COAL PRODUCTS											
2751	Chemical fertilisers	4.2	5.2	0.7	0.7	0.7	1.0	1.1	0.6	0.5	0.5
2752	Industrial gases)										
2754	Organic industrial chemicals nec)[i]	4.4	4.1	3.5	2.8	2.6	2.7	2.8	2.5	1.6	1.6
2753	Synthetic resins and rubber	20	17	15	12	12	9.9	8.4	6.5	5.6	3.9
2755	Inorganic industrial chemicals nec	12	11	9.8	8.0	5.8	3.4	3.1	2.4	1.9	1.4
275	**Basic chemicals**	**11**	**9.6**	**7.6**	**6.4**	**5.7**	**4.8**	**4.3**	**3.3**	**2.7**	**2.1**
2761	Ammunition, explosives and fireworks	5.7	8.1	10	10	9.8	2.5	4.1	4.8	4.8	4.6
2762	Paints	14	14	13	13	13	14	12	10	9.1	7.8
2763	Pharmaceutical and veterinary products	2.6	2.9	1.8	1.7	1.7	4.1	3.9	2.1	1.9	1.6
2764	Pesticides	21	18	17	15	14	11	9.0	5.9	5.1	3.3
2765	Soap and other detergents	6.4	9.8	13	13	13	11	10	9.4	8.2	6.0
2766	Cosmetics and toilet preparations	18	18	17	15	14	12	14	12	12	12
2767	Inks	22	20	17	15	14	21	16	13	11	10
2768	Chemical products nec	12	13	14	13	11	10	8.8	7.4	6.5	5.7
276	**Other chemical products**	**9.6**	**10**	**11**	**9.9**	**9.3**	**9.7**	**9.0**	**7.2**	**6.5**	**5.4**
277	**Petroleum refining**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
278	**Petroleum and coal products nec**	**12**	**12**	**10**	**9.4**	**8.0**	**1.9**	**2.0**	**1.8**	**1.9**	**1.4**
27	**CHEMICAL, PETROLEUM AND COAL PRODUCTS**	**4.2**	**4.1**	**3.8**	**3.4**	**3.1**	**2.2**	**2.1**	**1.6**	**1.4**	**1.2**

Industry [c]		Average nominal rate on outputs [d]					on materials [e]				
ASIC code	*Description*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*
NON-METALLIC MINERAL PRODUCTS											
285	**Glass and glass products**	**6.0**	**6.0**	**4.6**	**4.3**	**3.2**	**7.0**	**7.4**	**6.9**	**5.5**	**4.4**
2861	Clay bricks	0.1	0.1	0.1	0.1	0.1	1.5	1.5	1.3	1.2	1.2
2862	Refractories	7.0	6.7	6.4	6.2	4.5	2.6	2.5	1.5	1.2	1.1
2863	Ceramic tiles and pipes	8.6	8.9	8.7	8.2	7.2	3.4	3.5	3.3	3.2	2.8
2864	Ceramic goods nec	18	19	18	17	13	6.9	8.0	8.0	6.9	4.5
286	**Clay products and refractories**	**4.0**	**4.0**	**3.9**	**3.6**	**2.9**	**2.4**	**2.5**	**2.1**	**2.0**	**1.7**
2871	Cement	1.1	1.2	0.1	0.1	0.1	0.8	0.8	0.5	0.4	0.4
2872	Ready-mixed concrete)										
2873	Concrete pipes and box culverts)[i]	..	..	..	..	..	1.4	1.3	0.4	0.3	0.3
2874	Concrete products nec	1.7	1.8	1.9	1.7	1.7	3.8	3.6	2.8	2.5	2.4
287	**Cement and concrete products**	**0.8**	**0.8**	**0.5**	**0.5**	**0.5**	**1.7**	**1.6**	**0.9**	**0.8**	**0.7**
2881	Plaster products and expanded minerals)	11	12	10	9.9	7.3	6.6	6.4	5.1	4.6	4.0
2882	Stone products)[i]										
2883	Glass wool and mineral wool products	12	11	10	9.3	7.5	8.1	6.4	5.2	4.5	4.0
2884	Non-metallic mineral products nec	6.4	6.6	5.1	4.6	3.6	5.3	5.3	4.4	3.9	3.4
288	**Other non-metallic mineral products**	**9.4**	**9.4**	**8.1**	**7.6**	**5.8**	**6.2**	**5.9**	**4.8**	**4.3**	**3.7**
28	**NON-METALLIC MINERAL PRODUCTS**	**3.2**	**3.3**	**2.7**	**2.5**	**2.0**	**2.9**	**2.9**	**2.2**	**1.9**	**1.6**

Industry [c]		Average nominal rate on outputs [d]					on materials [e]				
ASIC code	*Description*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*
2941	Iron and steel basic products	7.8	7.2	6.6	6.4	6.1	6.3	6.1	5.5	5.5	4.9
2942	Iron casting	15	15	13	13	9.5	3.7	3.9	3.7	3.6	3.1
2943	Steel casting	19	19	17	16	13	3.4	3.7	3.5	3.3	2.8
2944	Iron and steel forging	13	15	17	16	13	7.1	7.0	6.6	6.4	5.9
2945	Steel pipes and tubes	14	14	13	11	9.0	9.9	9.4	9.0	8.6	7.4
294	**Basic iron and steel**	**8.9**	**8.4**	**7.8**	**7.4**	**6.7**	**6.5**	**6.3**	**5.7**	**5.6**	**5.0**
2951	Copper smelting, refining)	1.3	1.2	1.2	1.2	1.1	2.5	2.9	1.3	1.2	1.2
2955	Nickel smelting, refining)[i]										
2952	Silver, lead, zinc smelting, refining	–	–	–	–	–	0.1	0.1	0.1	0.1	0.1
2953	Alumina	0.2	0.1	..	..	..	8.5	6.4	4.7	4.2	2.7
2954	Aluminium smelting	–	–	–	–	–	1.3	1.8	1.3	1.0	0.9
2956	Non-ferrous metals nec, smelting, refining	1.6	1.7	0.4	0.4	0.4	1.5	1.6	0.1	0.1	0.1
2957	Secondary recovery and alloying of non-ferrous metals nec	1.8	1.9	0.4	0.4	0.3	1.7	1.7	0.1	0.1	0.1
295	**Basic non-ferrous metals**	**0.5**	**0.4**	**0.2**	**0.2**	**0.2**	**3.6**	**3.1**	**2.0**	**1.8**	**1.3**
2961	Aluminium rolling, drawing, extruding	12	12	11	10	7.9	1.8	1.8	0.1	0.1	0.1
2962	Non-ferrous metals nec, rolling, drawing, extruding	7.0	7.0	7.0	7.0	6.8	1.8	1.8	0.1	0.1	0.1
2963	Non-ferrous metal casting	9.4	9.0	7.3	6.7	5.4	2.0	2.1	0.4	0.4	0.4
296	**Non-ferrous metal basic products**	**10**	**10**	**9.5**	**9.0**	**7.4**	**1.9**	**1.9**	**0.1**	**0.1**	**0.1**
29	**BASIC METAL PRODUCTS**	**5.6**	**5.4**	**4.9**	**4.7**	**4.2**	**4.7**	**4.4**	**3.4**	**3.3**	**2.8**

Industry[c]		Average nominal rate on outputs[d]					on materials[e]				
ASIC code	Description	1986–87	1987–88[f]	1988–89	1989–90[g]	mid 90s	1986–87	1987–88[f]	1988–89	1989–90[g]	mid 90s
FABRICATED METAL PRODUCTS											
3141	Fabricated structural steel	11	11	9.4	8.7	7.1	9.3	9.5	9.3	8.9	7.8
3142	Architectural aluminium products	17	17	17	16	13	13	13	13	12	9.1
3143	Architectural metal products nec	15	15	14	13	11	9.3	9.0	8.5	8.3	7.2
314	**Structural metal products**	**13**	**13**	**12**	**11**	**9.1**	**10**	**11**	**10**	**9.7**	**8.1**
3151	Metal containers	15	15	13	12	10	11	11	10	9.8	8.5
3152	Sheet metal furniture	22	22	20	18	12	8.7	8.3	7.9	7.8	6.7
3153	Sheet metal products nec	15	16	16	15	12	11	10	9.7	9.5	8.5
315	**Sheet metal products**	**16**	**16**	**15**	**14**	**11**	**11**	**10**	**9.8**	**9.5**	**8.4**
3161	Cutlery and hand tools nec	18	18	16	16	13	10	9.9	9.3	8.5	7.5
3162	Springs and wire products	16	15	13	12	9.3	8.6	8.9	9.1	8.8	8.1
3163	Nuts, bolts, screws and rivets	22	22	20	18	14	8.6	8.5	8.3	8.0	7.3
3164	Metal coating and finishing	16	16	15	14	11	5.1	6.1	6.5	6.2	5.5
3165	Non-ferrous steam, gas and water fittings	20	20	18	17	13	8.7	8.7	8.2	8.0	7.0
3166	Boiler and plate work	18	18	17	16	13	10	10	9.9	9.5	7.8
3167	Metal blinds and awnings	18	19	18	18	16	13	14	14	13	10
3168	Fabricated metal products nec	18	18	17	16	13	11	10	10	9.5	8.0
316	**Other fabricated metal products**	**18**	**18**	**16**	**15**	**12**	**9.3**	**9.5**	**9.3**	**8.9**	**7.7**
31	**FABRICATED METAL PRODUCTS**	**16**	**15**	**14**	**13**	**11**	**10**	**10**	**9.8**	**9.4**	**8.1**

Industry [c]		Average nominal rate on outputs [d]					Average nominal rate on materials [e]				
ASIC code	*Description*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*
TRANSPORT EQUIPMENT											
3231	Motor vehicles[j]	35	33	29	30	25	8.9	9.0	14	19	16
3232	Motor vehicles bodies, trailers, caravans	24	22	19	19	13	16	14	13	12	9.5
3233	Motor vehicle instruments and electrical equipment nec[j]	15	15	22	26	22	15	15	14	13	10
3234	Motor vehicle parts nec[j]	14	14	20	24	20	14	14	12	12	9.1
323	**Motor vehicles and parts[j]**	**28**	**27**	**26**	**27**	**23**	**11**	**10**	**14**	**17**	**14**
3241	Ships	18	18	16	15	7.5	7.0	6.6	6.3	6.3	4.8
3242	Boats	18	18	17	15	11	10	9.8	8.4	7.6	6.1
3243	Railway rolling stock and locomotives	18	18	17	16	13	16	15	13	12	9.9
3244	Aircraft	1.8	2.3	1.5	1.4	1.1	2.3	2.3	0.7	0.6	0.6
3245	Transport equipment nec	21	21	19	18	14	9.5	9.5	9.0	8.4	7.0
324	**Other transport equipment**	**14**	**14**	**13**	**12**	**8.8**	**11**	**10**	**8.8**	**8.4**	**6.7**
32	**TRANSPORT EQUIPMENT[j]**	**23**	**22**	**22**	**22**	**18**	**11**	**10**	**13**	**15**	**13**
OTHER MACHINERY AND EQUIPMENT											
3341	Photographic and optical goods	6.6	6.4	6.0	8.0	6.8	7.6	7.5	6.8	6.4	5.8
3342	Photographic film processing	2.0	1.9	–	–	–	7.8	7.6	7.3	7.6	6.4
3343	Measuring, professional and scientific equipment nec	7.1	6.9	6.5	5.7	5.2	4.7	4.4	3.9	3.5	3.1
334	**Photographic, professional and scientific equipment**	**4.9**	**4.7**	**3.8**	**4.2**	**3.6**	**6.9**	**6.7**	**6.1**	**5.9**	**5.2**

Industry [c]		Average nominal rate on outputs [d]					on materials [e]				
ASIC code	*Description*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*	*1986 –87*	*1987 –88* [f]	*1988 –89*	*1989 –90* [g]	*mid 90s*
3351	Radio and TV receivers; audio equipment	18	15	13	12	10	7.8	6.9	5.6	4.9	3.9
3352	Electronic equipment nec	19	19	18	16	12	9.7	9.7	8.0	7.4	5.9
3353	Refrigerators and household appliances	23	23	21	18	13	16	15	13	12	10
3354	Water heating systems	20	20	19	17	13	3.8	3.5	3.4	3.3	2.6
3355	Electric and telephone cable and wire	15	15	14	13	10	12	11	10	9.8	8.7
3356	Batteries	30	30	27	23	14	5.7	5.3	3.9	3.4	3.1
3357	Electrical machinery and equipment nec	18	17	15	14	11	10	11	10	9.7	8.3
335	**Appliances and electrical equipment**	**20**	**19**	**17**	**16**	**12**	**11**	**11**	**10**	**9.2**	**7.8**
3361	Agricultural machinery	11	9.9	8.3	5.0	4.0	9.7	9.9	9.6	9.3	7.5
3362	Construction machinery	18	17	14	12	9.7	11	10	9.6	9.1	7.7
3363	Materials handling equipment	20	20	19	17	12	12	11	11	10	8.0
3364	Wood and metal working machinery	17	15	12	11	9.9	11	11	11	10	8.4
3365	Pumps and compressors	18	18	16	15	11	15	14	13	12	9.6
3366	Commercial space heating and cooling equipment	24	23	21	19	14	11	11	10	9.9	7.2
3367	Dies, saw blades and machine tool accessories	14	15	14	13	11	8.3	8.4	8.3	7.9	6.8
3368	Food processing machinery	17	16	14	13	10	11	11	10	9.9	8.3
3369	Industrial machinery and equipment nec	12	11	10	9.5	7.7	11	11	11	10	8.4
336	**Industrial machinery and equipment**	**14**	**14**	**12**	**11**	**8.6**	**11**	**11**	**11**	**10**	**8.1**
33	**OTHER MACHINERY AND EQUIPMENT**	**16**	**16**	**14**	**13**	**9.8**	**11**	**11**	**9.9**	**9.3**	**7.7**

Industry[c]		Average nominal rate on outputs[d]					on materials[e]				
ASIC code	Description	1986 –87	1987 –88[f]	1988 –89	1989 –90[g]	mid 90s	1986 –87	1987 –88[f]	1988 –89	1989 –90[g]	mid 90s
MISCELLANEOUS MANUFACTURING											
3451	Leather tanning and fur dressing	5.3	6.2	6.4	6.3	6.1	0.3	0.9	0.3	0.3	0.3
3452	Leather and leather substitute goods nec	23	20	20	19	15	12	11	11	11	10
345	**Leather and leather products**	**8.7**	**9.0**	**9.1**	**8.8**	**7.9**	**2.2**	**2.6**	**2.0**	**2.0**	**1.9**
3461	Rubber tyres, tubes, belts, hose and sheets	21	20	18	17	12	11	10	9.9	8.9	8.2
3462	Rubber products nec	25	23	21	19	15	8.7	8.2	8.1	7.2	6.8
346	**Rubber products**	**22**	**21**	**19**	**18**	**13**	**11**	**9.5**	**9.4**	**8.4**	**7.8**
3471	Flexible packaging and abrasive paper	20	19	17	15	13	18	16	14	12	11
3472	Rigid plastic sheeting)										
3473	Hard surface floor covering nec)[i]	17	16	14	12	12	14	14	13	11	11
3474	Plastic products nec	21	19	16	15	14	19	16	14	12	11
347	**Plastic and related products**	**20**	**19**	**16**	**15**	**13**	**18**	**16**	**14**	**12**	**11**
3481	Ophthalmic articles	15	15	14	12	10	8.2	7.8	7.7	6.9	5.6
3482	Jewellery and silverware	22	22	20	18	13	0.8	0.8	0.5	0.4	0.3
3483	Brooms and brushes	22	22	20	18	13	11	11	10	9.4	7.9
3484	Signs and advertising displays	12	15	16	15	12	8.9	8.0	7.6	6.7	6.2
3485	Sporting equipment	21	21	20	18	13	7.0	5.7	5.8	5.4	4.7
3486	Writing and marking equipment	15	15	14	13	11	11	9.9	8.9	8.1	7.3
3487	Manufacturing nec	18	18	15	14	10	11	13	13	13	7.3
348	**Other manufacturing**	**18**	**18**	**17**	**16**	**12**	**7.4**	**7.1**	**6.8**	**6.3**	**5.0**
34	**MISCELLANEOUS MANUFACTURING**	**19**	**18**	**16**	**15**	**13**	**14**	**12**	**11**	**9.6**	**8.6**
21-34	**TOTAL MANUFACTURING[k]**	**12(9)**	**11(9)**	**10(8)**	**9.6(8)**	**7.8(7)**	**7.4(6)**	**6.9(6)**	**6.3(5)**	**6.2(5)**	**5.3(4)**

- – Nil.
- .. Between - 0.05 per cent and 0.05 per cent.
- a Assistance provided by tariffs and certain non-tariff measures. Due to the increasing number of ASIC industries in receipt of low levels of assistance the Commission has, for the first time, reported rates of less than 10 per cent rounded to one decimal point. Estimates of 10 per cent or greater continue to be rounded to whole numbers. The presentation of some rates to one decimal point should not be interpreted as implying any greater degree of precision than previous estimates. It simply enables the detection of small movements in rates that are often hidden when estimates are presented as whole numbers.
- b In addition to presenting preliminary 1989–90 estimates, the Commission has revised some industry rates previously published for 1986–87 to 1988–89 and the mid-1990s. The most notable revision has been in the method for incorporating the effects of commercial tariff concession orders and by-laws. The effects on nominal rates on materials (and as a result, effective rates) are now based on more appropriate import data. The most significant changes have been in the textiles and clothing industries. The mid-1990s estimates are based on the final tariff rates that will apply at the end of the current phasing arrangements in July 1992, or in the case of PMV and TCF plan rates, from January 1992 and July 1995, respectively. The mid-1990s estimates have also been revised to incorporate changes in assistance announced subsequent to the May 1988 Economic Statement and some revisions in the measurement of certain forms of assistance
- c Industry subdivision, group and class from the Australian Standard Industrial Classification (ASIC) 1983 Edition.
- d The nominal rate of assistance on outputs of an industry is an average of the nominal rates on products made by that industry, weighted by the unassisted value of output for each product.
- e The nominal rate of assistance on materials used by an industry is an average of the nominal rates on materials used by that industry, weighted by the unassisted value of each material used.
- f Following the introduction of the Harmonized Tariff System on 1 January 1988, it was necessary to construct new concordances between the Harmonized Tariff items and the outputs produced by and materials used in each manufacturing industry. The estimates for 1987–88 thus represent an average of the rates that applied in the last half of 1987, as derived from using the old concordances, and the first half of 1988, as derived from the Harmonized concordances.
- g Preliminary estimates.
- h Because reliable data on price distortions for agricultural commodities in 1989–90 were not available, estimates for 1989–90 have been calculated on the assumption that price distortions for agricultural commodities remained at 1988–89 levels. The mid-1990s estimates are based on 1987–88 price distortions for agricultural commodities.
- i Assistance estimates were not calculated separately because production data are confidential.
- j The estimates for 1986–87 to 1987–88 and the first half of 1988–89 are based on an average price disadvantage of 10 per cent on components used as original equipment under the local content plan. To the extent that this understates the average penalty incurred by motor vehicle assemblers on original equipment, the effective rate estimates for Motor vehicles will be overstated, while the estimates for Motor vehicle instruments and electrical equipment nec and Motor vehicle parts nec will be understated. The PMV local content requirement was abolished on 1 January 1989. For the second half of 1988–89, 1989–90 and the mid-1990s, the nominal rate on components is equal to the operative tariff rate on plan components deflated by the relevant value for duty/landed duty free ratio.
- k The figures in brackets are the medians of the nominal rates of assistance for 4-digit ASIC industries using the weights specified for the averages to determine the 50th percentile.

Source: Commission estimates.

Table A11.5
Average effective rates of assistance[a], manufacturing industries: 1986–87 to 1989–90 and projected mid-1990s[b]
(per cent)

Industry[c] *ASIC code*	*Description*	*1986 –87*	*1987 –88*[d]	*1988 –89*	*1989 –90*[e]	*mid 90s*
FOOD, BEVERAGES AND TOBACCO						
2115	Meat (except smallgoods or poultry)	- 1.2	- 1.7	- 0.6	- 0.5	-0.5
2116	Poultry[f]	- 0.1	- 0.1	- 0.3	- 0.1	0.9
2117	Bacon, ham and smallgoods nec	13	14	13	13	13
211	**Meat products[f]**	**1.3**	**1.1**	**1.6**	**1.7**	**1.8**
2121	Liquid milk and cream[f]	- 3.5	- 3.7	- 3.4	- 3.4	- 3.4
2122	Butter[f]	1.1	0.9	1.0	1.0	0.9
2123	Cheese[f]	- 1.8	- 1.9	- 1.6	- 1.6	- 1.7
2124	Ice cream and frozen confections[f]	- 28	- 23	- 15	- 14	- 15
2125	Milk products nec[f]	- 37	- 28	- 19	- 19	- 19
212	**Milk products[f]**	**- 11**	**- 9.1**	**- 6.4**	**- 6.3**	**- 6.4**
2131	Fruit products[f]	30	16	8.5	8.9	6.2
2132	Vegetable products[f]	1.3	4.9	7.8	8.3	7.4
213	**Fruit and vegetable products[f]**	**11**	**8.8**	**8.0**	**8.5**	**7.0**
214	**Margarine and oils and fats nec**	**12**	**11**	**11**	**12**	**12**
2151	Flour mill products[f]	- 9.0	- 0.6	- 2.7	- 2.6	- 0.2
2152	Starch, gluten and starch sugars	12	14	15	13	7.7
2153	Cereal foods and baking mixes[f]	2.0	1.6	2.6	3.4	3.1
215	**Flour mill and cereal food products[f]**	**- 2.0**	**1.5**	**1.2**	**1.5**	**2.0**
2161	Bread[f]	- 4.3	- 3.9	- 2.9	- 2.6	- 2.5
2162	Cakes and pastries[f]	- 7.9	- 6.4	- 4.8	- 4.8	- 4.6
2163	Biscuits[f]	- 4.7	1.1	8.7	9.1	8.6
216	**Bread, cakes and biscuits[f]**	**- 5.4**	**- 3.3**	**- 0.5**	**- 0.3**	**- 0.3**
2171	Raw sugar)	1.9	3.8	2.3	2.3	3.6
2176	Food products nec)[f,g]					
2173	Confectionery and cocoa products[f]	21	23	26	24	18
2174	Processed seafoods	1.5	0.6	1.0	1.0	1.5
2175	Prepared animal and bird foods[f]	- 1.5	- 3.1	1.3	1.7	- 2.7
217	**Other food products[f]**	**4.4**	**5.7**	**5.7**	**5.5**	**4.9**

Industry[c]						
ASIC code	*Description*	*1986 –87*	*1987 –88*[f]	*1988 –89*	*1989 –90*[e]	*mid 90s*
2185	Soft drinks, cordials and syrups[f]	8.3	10	13	11	5.5
2186	Beer[f]	76	87	10	- 2.4	- 2.1
2187	Malt	1.6	- 1.0	2.2	2.3	2.2
2188	Wine and brandy[f]	26	25	19	20	19
2189	Alcoholic beverages nec[f]	0.5	4.8	9.5	9.3	5.1
218	**Beverages and malt**[f]	**36**	**41**	**12**	**7.6**	**5.1**
219	**Tobacco products**[f]	**8.1**	**3.9**	**- 4.3**	**- 6.2**	**3.7**
21	**FOOD, BEVERAGES & TOBACCO**[f]	**5.2**	**6.4**	**3.2**	**2.6**	**2.4**
TEXTILES						
2341	Cotton ginning[f]	- 16	- 16	- 13	- 12	- 10
2342	Wool scouring and top making	–	–	–	–	–
2343	Man-made fibres and yarns	70	79	87	84	71
2344	Man-made fibre broadwoven fabrics	142	156	182	185	110
2345	Cotton yarns and broadwoven fabrics	82	96	103	103	82
2346	Worsted yarns and broadwoven fabrics	50	60	74	73	64
2347	Woollen yarns and broadwoven fabrics	52	62	76	75	76
2348	Narrow woven and elastic textiles	52	53	53	53	53
2349	Textile finishing	103	135	171	169	102
234	**Textile fibres, yarns and woven fabrics**[f]	**72**	**84**	**97**	**97**	**71**
2351	Household textiles	117	90	120	126	131
2352	Textile floor coverings	184	175	163	151	144
2353	Felt and felt products	28	27	26	27	27
2354	Canvas and associated products nec	14	18	13	14	24
2355	Rope, cordage and twine	28	27	26	26	26
2356	Textile products nec	33	24	14	15	16
235	**Other textile products**	**62**	**56**	**51**	**50**	**52**
23	**TEXTILES**[f]	**68**	**73**	**79**	**78**	**63**
CLOTHING AND FOOTWEAR						
2441	Hosiery	188	192	180	131	109
2442	Cardigans and pullovers	> 250	234	239	> 250	168
2443	Knitted goods nec	159	181	147	157	105
244	**Knitting mills**	**192**	**197**	**178**	**172**	**121**

Industry[c]						
ASIC code	*Description*	*1986 –87*	*1987 –88*[d]	*1988 –89*	*1989 –90*[e]	*mid 90s*
2451	Mens trousers and shorts; work clothing	128	129	173	210	120
2452	Mens suits and coats; waterproof clothing	139	143	178	144	116
2453	Womens outerwear nec	157	196	164	191	134
2454	Foundation garments	> 250	116	156	176	114
2455	Underwear and infants clothing nec	> 250	> 250	233	> 250	129
2456	Headwear and clothing nec	57	51	43	49	37
245	**Clothing**	**168**	**167**	**159**	**177**	**109**
246	**Footwear**	**185**	**164**	**217**	**238**	**112**
24	**CLOTHING AND FOOTWEAR**	**176**	**174**	**170**	**183**	**112**
WOOD, WOOD PRODUCTS AND FURNITURE						
2531	Log sawmilling	3.8	3.9	3.6	3.9	3.4
2532	Resawn and dressed timber	17	17	16	15	11
2533	Veneers and manufactured boards of wood	27	27	26	23	20
2534	Wooden doors	15	16	16	15	11
2535	Wooden structural fittings and joinery nec	17	17	16	14	10
2536	Wooden containers	9.8	9.9	9.1	8.3	6.4
2537	Hardwood woodchips	- 0.2	- 0.2	- 0.1	- 0.1	- 0.1
2538	Wood products nec	22	22	20	19	15
253	**Wood and wood products**	**13**	**13**	**12**	**11**	**8.7**
2541	Furniture (except sheet metal)	38	38	33	29	16
2542	Mattresses (except rubber)	- 0.7	- 1.2	- 2.6	- 2.7	0.7
254	**Furniture and mattresses**	**31**	**31**	**27**	**23**	**13**
25	**WOOD, WOOD PRODUCTS AND FURNITURE**	**18**	**18**	**17**	**15**	**10**
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING						
2631	Pulp, paper and paperboard	19	21	20	17	17
2632	Paper bags (including textile bags)	30	32	32	24	19
2633	Solid fibreboard containers	45	43	39	30	24
2634	Corrugated fibreboard containers	38	38	36	26	19
2635	Paper products nec	38	36	33	25	20
263	**Paper and paper products**	**31**	**31**	**29**	**22**	**19**

ASIC code	*Industry[c]* *Description*	*1986 –87*	*1987 –88[f]*	*1988 –89*	*1989 –90[e]*	*mid 90s*
2641	Publishing	0.2	0.2	0.1	0.1	0.1
2642	Printing and publishing	..	- 0.2	- 0.3	- 0.3	- 0.3
2643	Paper stationery	34	33	30	23	18
2644	Printing and bookbinding	31	23	13	10	7.6
2645	Printing trade services nec	- 0.4	- 0.4	- 2.7	- 2.8	- 2.1
264	**Printing and allied industries**	**12**	**9.5**	**6.3**	**4.7**	**3.6**
26	**PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING**	**16**	**15**	**12**	**8.8**	**7.2**
CHEMICAL, PETROLEUM AND COAL PRODUCTS						
2751	Chemical fertilisers	21	27	1.2	1.7	1.7
2752	Industrial gases)					
2754	Organic industrial chemicals nec)[g]	8.9	7.4	6.3	5.8	5.1
2753	Synthetic resins and rubber	47	38	36	30	31
2755	Inorganic industrial chemicals nec	28	24	23	19	14
275	**Basic chemicals**	**28**	**25**	**20**	**17**	**16**
2761	Ammunition, explosives and fireworks	8.4	12	15	15	14
2762	Paints	14	16	19	20	22
2763	Pharmaceutical and veterinary products	1.3	2.1	1.5	1.6	1.8
2764	Pesticides	49	46	51	46	46
2765	Soap and other detergents	1.3	9.2	18	18	19
2766	Cosmetics and toilet preparations	22	21	21	17	15
2767	Inks	26	29	26	22	21
2768	Chemical products nec	14	19	23	22	19
276	**Other chemical products**	**9.4**	**12**	**14**	**14**	**14**
277	**Petroleum refining**	**–**	**–**	**–**	**–**	**–**
278	**Petroleum and coal products nec**	**43**	**42**	**37**	**33**	**29**
27	**CHEMICAL, PETROLEUM AND COAL PRODUCTS**	**12**	**12**	**12**	**11**	**11**
NON-METALLIC MINERAL PRODUCTS						
285	**Glass and glass products**	**5.4**	**5.3**	**3.3**	**3.6**	**2.6**
2861	Clay bricks	- 0.8	- 0.8	- 0.6	- 0.6	- 0.6
2862	Refractories	14	13	14	14	9.9
2863	Ceramic tiles and pipes	12	13	12	12	10
2864	Ceramic goods nec	24	24	22	21	16
286	**Clay products and refractories**	**5.0**	**5.0**	**5.0**	**4.7**	**3.7**

Industry[c]						
ASIC code	*Description*	*1986 –87*	*1987 –88*[d]	*1988 –89*	*1989 –90*[e]	*mid 90s*
2871	Cement	1.5	1.7	- 0.4	- 0.4	- 0.3
2872	Ready-mixed concrete)					
2873	Concrete pipes and box culverts)[g]	- 3.6	- 3.3	- 1.1	- 0.8	- 0.8
2874	Concrete products nec	0.2	0.6	1.3	1.2	1.3
287	**Cement and concrete products**	**- 0.7**	**- 0.4**	**..**	**0.1**	**0.2**
2881	Plaster products and expanded) minerals)[g]	16	17	15	15	11
2882	Stone products)					
2883	Glass wool and mineral wool products	15	14	14	13	9.8
2884	Non-metallic mineral products nec	7.4	7.8	5.7	5.2	3.8
288	**Other non-metallic mineral products**	**12**	**13**	**11**	**11**	**7.7**
28	**NON-METALLIC MINERAL PRODUCTS**	**3.5**	**3.7**	**3.3**	**3.2**	**2.4**
BASIC METAL PRODUCTS						
2941	Iron and steel basic products	11	9.5	9.0	8.3	8.6
2942	Iron casting	26	25	23	21	16
2943	Steel casting	30	30	28	26	21
2944	Iron and steel forging	23	29	34	32	26
2945	Steel pipes and tubes	21	21	19	16	12
294	**Basic iron and steel**	**14**	**13**	**12**	**11**	**10**
2951	Copper smelting, refining)					
2955	Nickel smelting, refining)[g]	- 15	- 20	..	1.1	- 0.4
2952	Silver, lead, zinc smelting, refining	- 0.5	- 0.5	- 0.4	- 0.4	- 0.4
2953	Alumina	- 16	- 12	- 9.1	- 8.1	- 5.1
2954	Aluminium smelting	- 2.2	- 3.0	- 2.2	- 1.7	- 1.6
2956	Non-ferrous metals nec, smelting, refining	1.9	2.0	2.6	2.6	2.6
2957	Secondary recovery and alloying of non-ferrous metals nec	2.7	2.5	2.0	2.1	1.5
295	**Basic non-ferrous metals**	**- 9.0**	**- 7.7**	**- 5.0**	**- 4.3**	**- 2.9**
2961	Aluminium rolling, drawing, extruding	48	47	49	46	35
2962	Non-ferrous metals nec, rolling, drawing, extruding	29	28	36	36	35
2963	Non-ferrous metal casting	18	17	15	14	11
296	**Non-ferrous metal basic products**	**37**	**37**	**39**	**38**	**31**
29	**BASIC METAL PRODUCTS**	**8.0**	**7.8**	**8.6**	**8.2**	**7.5**
FABRICATED METAL PRODUCTS						
3141	Fabricated structural steel	14	12	9.5	8.3	6.1
3142	Architectural aluminium products	25	24	24	23	20
3143	Architectural metal products nec	22	22	21	19	15
314	**Structural metal products**	**17**	**16**	**14**	**13**	**11**

Industry[c] ASIC code	*Description*	*1986 –87*	*1987 –88*[f]	*1988 –89*	*1989 –90*[e]	*mid 90s*
3151	Metal containers	22	22	19	16	13
3152	Sheet metal furniture	41	41	36	32	19
3153	Sheet metal products nec	21	23	23	21	16
315	**Sheet metal products**	**23**	**24**	**23**	**20**	**15**
3161	Cutlery and hand tools nec	22	22	21	20	16
3162	Springs and wire products	27	24	18	16	11
3163	Nuts, bolts, screws and rivets	34	34	31	28	20
3164	Metal coating and finishing	23	23	22	20	15
3165	Non-ferrous steam, gas and water fittings	30	30	27	25	19
3166	Boiler and plate work	27	27	26	24	20
3167	Metal blinds and awnings	23	26	24	24	23
3168	Fabricated metal products nec	26	25	23	21	17
316	**Other fabricated metal products**	**26**	**26**	**23**	**22**	**17**
31	**FABRICATED METAL PRODUCTS**	**22**	**22**	**20**	**18**	**14**
TRANSPORT EQUIPMENT						
3231	Motor vehicles[h]	> 250	243	162	119	109
3232	Motor vehicles bodies, trailers, caravans	35	34	29	29	18
3233	Motor vehicle instruments and electrical equipment nec[h]	17	16	38	53	47
3234	Motor vehicle parts nec[h]	14	15	32	43	38
323	**Motor vehicles and parts[h]**	**92**	**88**	**72**	**65**	**57**
3241	Ships	25	24	23	20	9.2
3242	Boats	30	30	29	26	18
3243	Railway rolling stock and locomotives	19	20	19	18	15
3244	Aircraft	1.6	2.3	1.8	1.7	1.4
3245	Transport equipment nec	33	34	31	29	22
324	**Other transport equipment**	**16**	**16**	**15**	**14**	**10**
32	**TRANSPORT EQUIPMENT[h]**	**47**	**46**	**39**	**35**	**29**
OTHER MACHINERY AND EQUIPMENT						
3341	Photographic and optical goods	4.4	4.1	4.3	12	9.0
3342	Photographic film processing	0.1	0.1	- 2.3	- 2.4	- 2.0
3343	Measuring, professional and scientific equipment nec	8.7	8.5	8.2	7.2	6.6
334	**Photographic, professional and scientific equipment**	**3.5**	**3.3**	**2.0**	**2.9**	**2.5**

Industry[c] *ASIC code*	*Description*	*1986 –87*	*1987 –88*[d]	*1988 –89*	*1989 –90*[e]	*mid 90s*
3351	Radio and TV receivers; audio equipment	30	24	21	20	18
3352	Electronic equipment nec	30	30	28	26	19
3353	Refrigerators and household appliances	33	34	31	27	17
3354	Water heating systems	40	40	37	34	26
3355	Electric and telephone cable and wire	21	23	21	20	13
3356	Batteries	76	77	70	61	34
3357	Electrical machinery and equipment nec	27	24	20	18	13
335	**Appliances and electrical equipment**	**30**	**30**	**26**	**24**	**17**
3361	Agricultural machinery	12	9.9	6.7	-0.4	- 0.4
3362	Construction machinery	34	31	24	17	14
3363	Materials handling equipment	30	32	30	26	18
3364	Wood and metal working machinery	22	19	14	11	11
3365	Pumps and compressors	20	21	20	17	13
3366	Commercial space heating and cooling equipment	40	39	34	31	22
3367	Dies, saw blades and machine tool accessories	18	18	17	16	14
3368	Food processing machinery	22	20	18	16	12
3369	Industrial machinery and equipment nec	12	12	9.5	8.7	7.0
336	**Industrial machinery and equipment**	**17**	**17**	**14**	**12**	**9.1**
33	**OTHER MACHINERY AND EQUIPMENT**	**22**	**22**	**19**	**17**	**12**
MISCELLANEOUS MANUFACTURING						
3451	Leather tanning and fur dressing	22	24	27	27	26
3452	Leather and leather substitute goods nec	39	34	34	31	23
345	**Leather and leather products**	**27**	**27**	**29**	**28**	**25**
3461	Rubber tyres, tubes, belts, hose and sheets	35	35	31	28	18
3462	Rubber products nec	42	40	35	32	23
346	**Rubber products**	**38**	**37**	**32**	**30**	**20**
3471	Flexible packaging and abrasive paper	25	26	22	20	18
3472	Rigid plastic sheeting)					
3473	Hard surface floor covering nec)[g]	21	19	16	14	13
3474	Plastic products nec	23	21	19	18	16
347	**Plastic and related products**	**24**	**22**	**20**	**18**	**17**

Industry[c]						
ASIC code	*Description*	*1986 –87*	*1987 –88*[f]	*1988 –89*	*1989 –90*[e]	*mid 90s*
3481	Ophthalmic articles	19	18	18	15	13
3482	Jewellery and silverware	58	58	54	50	36
3483	Brooms and brushes	33	33	29	27	19
3484	Signs and advertising displays	15	21	22	21	15
3485	Sporting equipment	37	38	34	31	22
3486	Writing and marking equipment	19	20	19	18	15
3487	Manufacturing nec	27	24	18	15	14
348	**Other manufacturing**	**28**	**30**	**28**	**25**	**19**
34	**MISCELLANEOUS MANUFACTURING**	**27**	**26**	**24**	**22**	**18**
21-34	**TOTAL MANUFACTURING**[i]	**19**	**19**	**17**	**16**	**12**
		(12)	**(12)**	**(10)**	**(9)**	**(9)**

– Nil.

.. Between - 0.05 per cent and 0.05 per cent.

a Assistance to an activity, net of the effects of tariffs and certain other froms of government intervention which alter the prices of material inputs used by the industry. Due to the increasing number of ASIC industries in receipt of low levels of assistance the Commission has, for the first time, reported rates of less than 10 per cent rounded to one decimal point. Estimates of 10 per cent or greater continue to be rounded to whole numbers. The presentation of some rates to one decimal point should not be interpreted as implying any greater degree of precision than previous estimates. It simply enables the detection of small movements in rates that are often hidden when estimates are presented as whole numbers. Effective rate estimates above 250 per cent have not been published because of the sensitivity of extremely high estimates to small changes in the parameters of the effective rate.

b In addition to presenting preliminary 1989–90 estimates, the Commission has revised some industry rates previously published for 1986–87 to 1988–89 and the mid-1990s. The most notable revision has been in the method for incorporating the effects of commercial tariff concession orders and by-laws. The effects on nominal rates on materials (and as a result effective rates) are now based on more appropriate import data. The most significant changes have been in the textiles and clothing industries. The mid-1990s estimates are based on the final tariff rates that will apply at the end of the current phasing arrangements in July 1992, or in the case of PMV and TCF plan rates, from January 1992 and July 1995 respectively. The revised mid-1990s estimates also incorporate changes in assistance announced subsequent to the May 1988 Economic Statement and some revisions in the measurement of certain forms of assistance.

c Industry subdivision, groups and class from the Australian Standard Industrial Classification (ASIC) 1983 Edition.

d Following the introduction of the Harmonized Tariff System on 1 January 1988, it was necessary to construct new concordances between Harmonized Tariff items and the outputs produced by and materials used in each manufacturing industry. The estimates for 1987–88 thus represent an average of the rates that applied in the last half of 1987, as derived from using the old concordance, and the first half of 1988, as derived from the Harmonized concordances.

e Preliminary estimates.

f Because reliable data on price distortions for agricultural commodities in 1989–90 were not available, estimates for 1989–90 have been calculated on the assumption that price distortions for agricultural commodities remained at 1988–89 levels. The mid-1990s estimates are based on 1987–88 price distortions for agricultural commodities.

g Assistance estimates were not calculated separately because production data are confidential.

h The estimates for 1986–87 to 1987–88 and the first half of 1988–89 are based on an average price disadvantage of 10 per cent on components used as original equipment under the local content plan. To the extent that this understates the average penalty incurred by motor vehicle assemblers on original equipment, the effective rate estimates for motor vehicles will be overstated, while the estimates for motor vehicle instruments and electrical equipment nec and motor vehicle parts nec will be understated. The PMV local content requirement was abolished on 1 January 1989. For the second half of 1988–89, 1989–90 and the mid-1990s, the nominal rate on components is equal to the operative tariff rate on plan components deflated by the relevant value for duty/landed duty free ratio.

i The figures in brackets are the medians of the effective rate of assistance for 4-digit ASIC industries using unassisted value-added weights to determine the 50th percentile.

Table A11.6

Standard deviations[a] for nominal and effective rates of assistance, manufacturing subdivisons[b]: 1986–87 to 1989–90 and projected mid-1990s[c]

(percentage points)

Industry[b]		*Nominal rate on outputs*					*Effective rates of assistance*				
ASIC code	*Description*	*1986 –87*	*1987 –88[d]*	*1988 –89*	*1989 –90[e]*	*mid 90s*	*1986 –87*	*1987 –88[d]*	*1988 –89*	*1989 –90[e]*	*mid 90s*
21	Food, beverages and tobacco[f]	9	9	5	5	5	19	20	8	8	7
23	Textiles[f]	15	17	19	19	14	51	55	63	62	43
24	Clothing and footwear	19	17	14	16	7	70	64	56	64	32
25	Wood, wood products and furniture	8	8	7	6	4	14	14	12	10	6
26	Paper, paper products, printing and publishing	9	9	7	6	5	16	15	13	10	8
27	Chemical, petroleum and coal products	7	6	6	5	5	15	13	13	11	12
28	Non-metallic mineral products	4	4	4	4	3	6	6	6	5	4
29	Basic metal products	5	5	4	4	3	16	15	14	13	10
31	Fabricated metal products	3	3	3	3	2	6	6	6	6	5
32	Transport equipment	11	10	8	8	8	81	75	48	35	33
33	Other machinery and equipment	6	6	5	5	3	12	12	11	10	7
34	Miscellaneous manufacturing	5	4	3	3	2	8	8	8	7	4
21-34	**Total manufacturing**	**13**	**12**	**12**	**12**	**9**	**37**	**36**	**31**	**31**	**21**

a Standard deviations calculated between 4-digit ASIC industries within a subdivision. The standard deviation measures how far from the average the items in a frequency distribution are located, thereby measuring the extent of variation or dispersion in the distribution. The larger the variability in rates of assistance between individual industries, the larger the standard deviation.

b Industry subdivisions from the Australian Standard Industrial Classification (ASIC) 1983 Edition.

c In addition to presenting preliminary 1989–90 estimates, the Commission has revised some figures previously published for 1986–87 to 1988–89 and the mid-1990s (see footnote b of table A11.4). The mid-1990s estimates are based on the final tariff rates that will apply at the end of the current phasing arrangements in July 1992, or in the case of PMV and TCF plan rates, from January 1992 and July 1995 respectively.

d Following the introduction of the Harmonized Tariff System on 1 January 1988, it was necessary to construct new concordances between the Harmonized Tariff items and the outputs produced by and materials used in each manufacturing industry. The estimates for 1987–88 thus represent an average of the rates that applied in the last half of 1987, as derived from using the old concordances, and the first half of 1988, as derived from use of the new Harmonized concordances.

e Preliminary estimates.

f Because reliable data on price distortions for agricultural commodities in 1989–90 were not available, estimates for 1989–90 have been calculated on the assumption that price distortions for agricultural commodities remain at the 1988–89 level. The mid-1990s estimates are based on 1987–88 price distortions for agricultural commodities.

Source: Commission estimates.

Table A11.7

Subsidy equivalents, tax on materials and consumer tax equivalents,[a] manufacturing subdivisions[b]: 1988–89 and 1989–90[c]

($ million)

Industry		*Gross subsidy equivalent*[d]		*Tax on materials*[e]		*Net subsidy equivalent*[f]		*Consumer tax equivalent*[g]	
ASIC Code	*Description*	*1988–89*	*1989–90*	*1988–89*	*1989–90*	*1988–89*	*1989–90*	*1988–89*	*1989–90*
21	Food, beverages and tobacco[h]	1 378	1 361	1 107	1 141	270	219	1 377	1 227
23	Textiles[h]	824	838	188	185	635	653	347	359
24	Clothing and footwear	1 424	1 618	324	346	1 100	1 272	1 729	2 051
25	Wood, wood products and furniture	559	550	185	187	374	363	289	281
26	Paper, paper products, printing and publishing	641	521	203	182	438	339	80	67
27	Chemical, petroleum and coal products	767	706	266	237	502	469	217	204
28	Non-metallic mineral products	130	130	52	48	78	83	29	29
29	Basic metal products	836	788	399	380	437	408	109	106
31	Fabricated metal products	977	977	374	386	602	591	225	229
32	Transport equipment	1 918	2 097	741	959	1 177	1 138	1 638	1 732
33	Other machinery and equipment	1 308	1 235	483	475	825	760	1 142	1 136
34	Miscellaneous manufacturing	836	779	314	280	521	498	310	310
21-34	**Total manufacturing**	**11 598**	**11 599**	**4 638**	**4 806**	**6 960**	**6 793**	**7 492**	**7 732**

a These measures represent the income transfers throughout the community from assistance and, consequently, should not be used as measures of the economic (or welfare) costs to the community of assistance. Figures are expressed in current year prices using price indexes of articles produced by manufacturing industries. Figures may not add due to rounding.

b Industry subdivisions from the Australian Standard Industrial Classification (ASIC) 1983 Edition.

c Preliminary estimates.

d The gross subsidy equivalent is the change in producers' gross returns from assistance. It is the notional amount of money necessary to provide an industry with a level of assistance equivalent to the nominal rate of assistance on its output. Gross subsidy equivalents for individual industries have been summed to derive totals for industry groups and the sector as a whole. The summation of these amounts across industries will exceed the group and sector totals due to the outputs of many industries being used by other industries as intermediate inputs.

e The tax on materials is the net change in costs to user industries due to government intervention altering the prices paid for intermediate inputs. Taxes on materials for individual industries have been summed to derive totals for industry groups and the sector as a whole. The summation of these amounts across industries will exceed the group and sector totals due to the outputs of many industries being used by other industries as intermediate inputs.

f The net subsidy equivalent is the change in returns to an activity's value added due to assistance. It is the notional amount of money necessary to provide a level of assistance to an activity's value added equivalent to its effective rate of assistance. It is equal to the gross subsidy equivalent plus assistance to value-adding factors, less the tax on materials.

g The consumer tax equivalent is the transfer from final consumers paying higher prices due to assistance. The exclusion of intermediate usage differs from some previous calculations which included the transfers from both final consumers and intermediate users due to assistance-induced price increases. Consequently, the estimates in this table which cover only transfers from consumers of final goods, cannot be compared with estimates published prior to 1984–85. Transfers due to intermediate usage of outputs by other industries were excluded using ABS input-output data for 1980–81.

h Because reliable data on price distortions for agricultural commodities in 1989–90 were not available, estimates for 1989–90 have been calculated on the assumption that price distortions for agricultural commodities remained at 1988–89 levels. The mid-1990s estimates are based on 1987–88 price distortions for agricultural commodities.

Source: Commission estimates.

Appendix 12
Assistance as a consumer tax

Interventions like import tariffs and quotas raise domestic prices. As a result, consumers pay more for imported goods and for domestically produced substitutes. Thus, the initial effect of assistance on the price of household goods can be taken to represent the taxing effect of assistance on consumers.

In its 1987–88 Annual Report, the IAC used results from the 1984 Household Expenditure Survey (HES) and data from its assistance measurement systems to look at the initial price effects of assistance on households. More recently, the Commission undertook a study of the consumer tax effects of assistance by State for the Economic Planning Advisory Council using data from the 1984 HES. The results reported in this appendix use the 1988–89 HES results and updated price effect estimates of assistance from the Commission's assistance measurement systems. The analysis is presented by income decile for Australia and by State.

The taxing effect of assistance on consumers is measured as a consumer tax equivalent and is defined as the value of the transfers from final consumers paying higher prices due to assistance.[1] The transfers accrue to the domestic producers of assisted goods, importers of quota protected goods and the Commonwealth Government through tariffs levied on imports.

The method used to derive the initial price (or taxing) effects of assistance is similar to that used in the 1987–88 IAC study. As there, the initial price increasing effects of tariffs and quantitative restrictions, and the price changing effects of statutory agricultural marketing arrangements are included.

Commodity concordances

A concordance was developed between the 430 HES expenditure items and 114 input-output commodity groups to link:

- the Commission's assistance measurement data bases, which provide information about the initial price effects of assistance at the commodity level; with
- input-output statistics dealing with the formation of consumer prices for input-output commodity groups; and
- HES data about household incomes and expenditures.

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1 The Commission also publishes estimates of consumer tax equivalents annually as part of manufacturing industry assistance estimates (table A11.7). Relationships between the estimates are described in a note at the end of this appendix.

With the concorded system, it was possible to derive the effects of assistance on consumers from its effects on the price of imported goods and on the price of domestically produced goods, and the cost of services incurred in the transport and distribution of those goods. These service components of consumer prices were not separately distinguished in the previous study.

Price effect of assistance at the consumer level

The price raising effects of assistance on consumer prices were derived by first estimating the price effects of assistance on domestically producted goods valued on an ex factory basis and on imports valued on a landed duty paid basis. The value of transactions at this point in the production and distribution chain are referred to as *basic values*. Basic value information on goods was aggregated to ASIC industry commodity groups and then to input-output commodity groups.

The cost of assistance to consumers was then derived by using input-output data on margins to build up consumer price effects from the effects of assistance on basic values. Margins include transport and distribution costs and, where applicable, the cost of specific commodity taxes such as excise and wholesale sales taxes (less any commodity subsidies). For this study, no change was assumed in the cost of transport and distribution services. Where appropriate, commodity taxes, such as wholesale sales taxes, were indexed to the basic value of the goods.

By building up consumer prices from basic values and margins, it has been possible to replace the assumption adopted in the 1987–88 IAC study that transport and distribution margins vary in proportion to changes in the basic value of goods, with the more conservative assumption of no change in those margins.

As would be expected under this assumption, the price effects on consumers were substantially moderated by the incidence of transport and distribution costs. figure A12.1 illustrates the relationship between the price effects of assistance on basic values and on consumer prices for 13 commodity groups covering agriculture, mining and manufacturing. For example, under the conservative assumption of no change in transport and distribution margins, assistance to clothing and footwear increases the basic values of these goods by an average of 65 per cent which translates to an average increase of about 35 per cent in their consumer prices. Consumer prices for transport equipment are raised by an average of 14 per cent and food, beverages and tobacco prices by about 3 per cent.

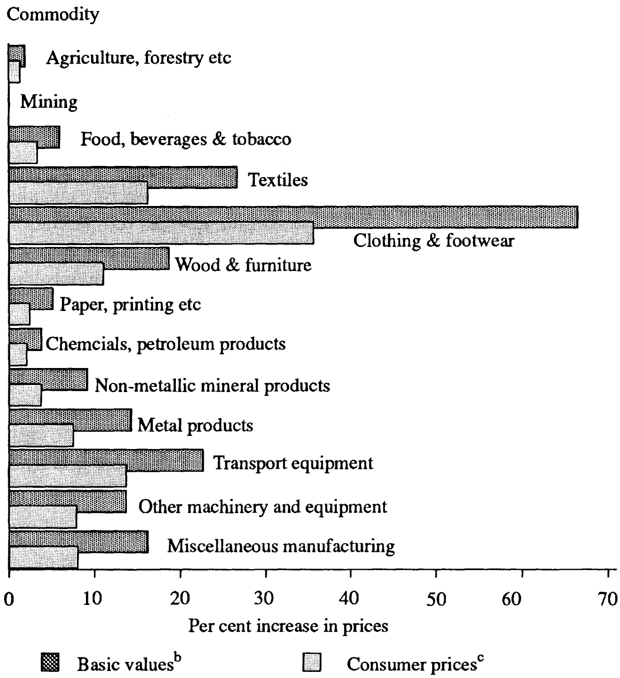
In interpreting the results, note should be taken:

- that only the initial effects of assistance on prices of imported and domestically produced goods are considered — all other factors, such as changes in the patterns of consumption and production, exchange rates, factor usage, incomes and wage rates, are assumed to remain unchanged;[2]

---

2 In practice, consumers and producers respond to initial price effects by changing patterns of consumption and production. The changed levels and patterns of consumption could be regarded as the taxing effect of assistance.

Figure A12.1
Estimated price effects of assistance on basic values and consumer prices by commodity group: 1988–89[a]



a The price effects include the price increasing effects of tariffs and quantitative restrictions on imports and locally produced goods and the price changing effects of agricultural marketing arrangements.

b Basic values relate to the ex factory, ex farm or ex mine values of domestically produced goods and the landed duty paid values of imports.

c Consumer prices relate to retail prices of the goods and include basic values of the goods plus transport and distribution margins.

Source: Commission estimates.

- the border price of imports and the ex factory price of domestically produced goods are increased by the full extent of protection available; and
- the price of goods and services purchased by consumers and which do not directly compete with imports are unchanged.

By using the classification of household expenditure provided in the HES, it was possible to analyse the consumer tax effect of assistance on households by income group. It was assumed that the price effect of assistance on each commodity was the same for all consumers, irrespective of the income group to which the consumer household was classified. The calculated consumer tax equivalents reflect the combined effects of the different expenditure patterns of households in each group and the estimated price effect for each commodity.

Expenditure patterns by income group

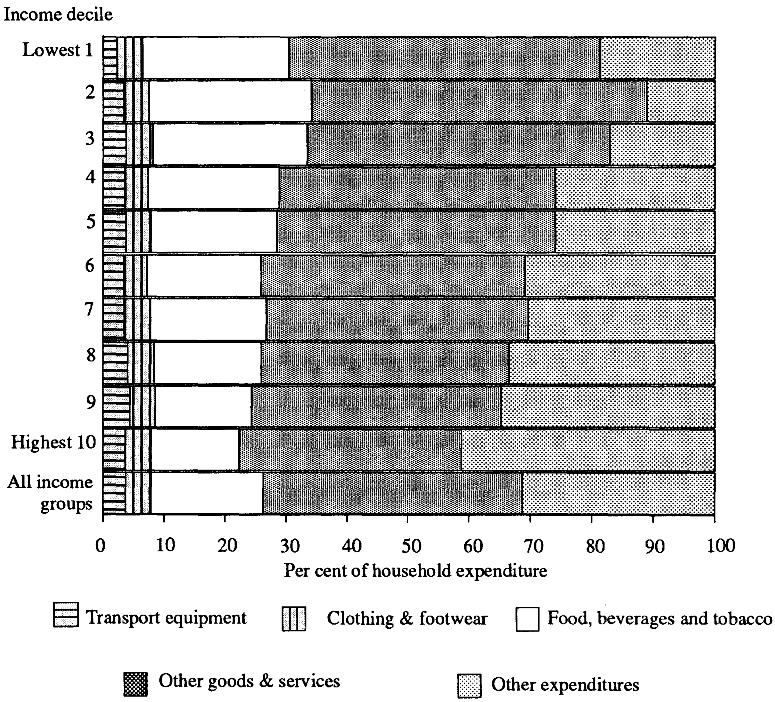
The significance of assistance to households depends on the level of expenditure, the share of household expenditure spent on goods and services (consumption) and the commodity composition of consumption. The *share* of goods and services in total household expenditure differs between households. This is shown by income decile in figure A12.2 where expenditure on goods and services has been aggregated into the following four categories: transport equipment; clothing and footwear; food, beverages and tobacco; and other goods and services.

As shown in figure A12.2, the lower income groups commit a larger share of total household expenditure to consumption of goods and services than do the higher income groups. Higher consumer-goods prices due to assistance are therefore likely to affect the lower income groups more than the higher income groups.

The consumer tax effect of assistance also depends on the *commodity composition* of consumption. The higher the income group, the lower the proportion of consumption expenditure spent on food, beverages and tobacco, and the higher the proportion of consumption expenditure devoted to clothing and footwear and transport equipment. The lowest income group spent proportionately less on the highly assisted transport equipment category than did the other groups.

The *level* of the tax between income groups varies with levels of expenditure. The estimated level of private final consumption expenditure, number of people and per capita expenditure for each income group are reported in table A12.1. The number of people varies between income groups as higher income households contain, on average, more people. Even after allowance is made for household size, per capita consumption in the higher income groups exceeds the per capita consumption in the lower income groups. Thus, the absolute incidence of the consumer tax is likely to be greater for the higher income groups although the relative incidence of the tax is likely to be greater for the lower income groups.

Figure A12.2
Expenditure shares by broad expenditure category: 1988–89



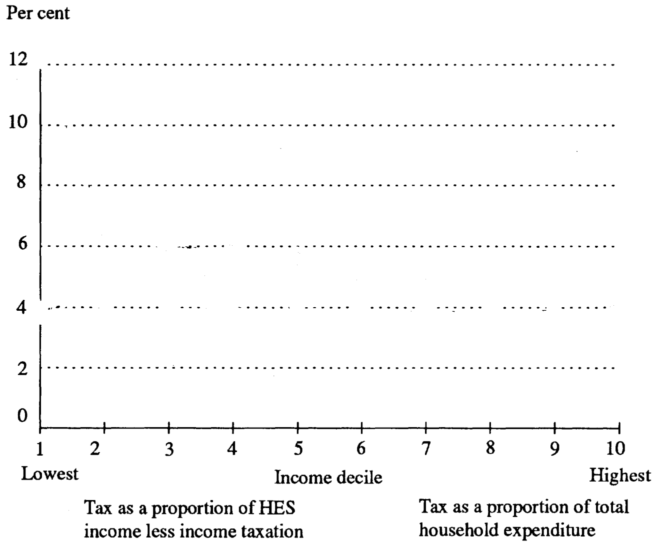
Source: ABS (1990a)

Consumer price and taxing effects

Table A12.1 presents information on the initial price effects of assistance. Consumer prices are estimated to have been increased by assistance on average by 5.6 per cent in 1988–89. The price increase amounts to a *consumer tax equivalent* to over $10 800 million (1988–89 values) or some $650 per Australian. The consumer tax equivalent of assistance amounts to some 5 per cent of recorded household income less income taxation and some 3.8 per cent of household expenditure.

The consumer price effects were proportionately greater for the higher income groups than for the lower groups mainly because clothing and footwear and transport equipment are a bigger part of consumption expenditure for the higher

Figure A12.3
Consumer tax as a proportion of HES disposable income and expenditure: 1988–89



Source: Commission estimates

than for lower income groups. While consumer price effects and the tax equivalents *increase* as income rises, there is a gradual, although variable, *decline* in the importance of assistance as a cost when compared to estimated disposable income (measured as reported income less income taxation) and to total expenditure (figure A12.3).

On the basis of estimated disposable income, the taxing effect of assistance on households is regressive, increasing from 4 per cent of income for the highest income group to 12 per cent for the lowest. However, as noted by the ABS, the reliability of income estimates is open to question. To the extent that income under records the availability of funds for consumption and the accounting for government benefits and taxes is incomplete, the regressiveness of assistance is over estimated (ABS 1987).

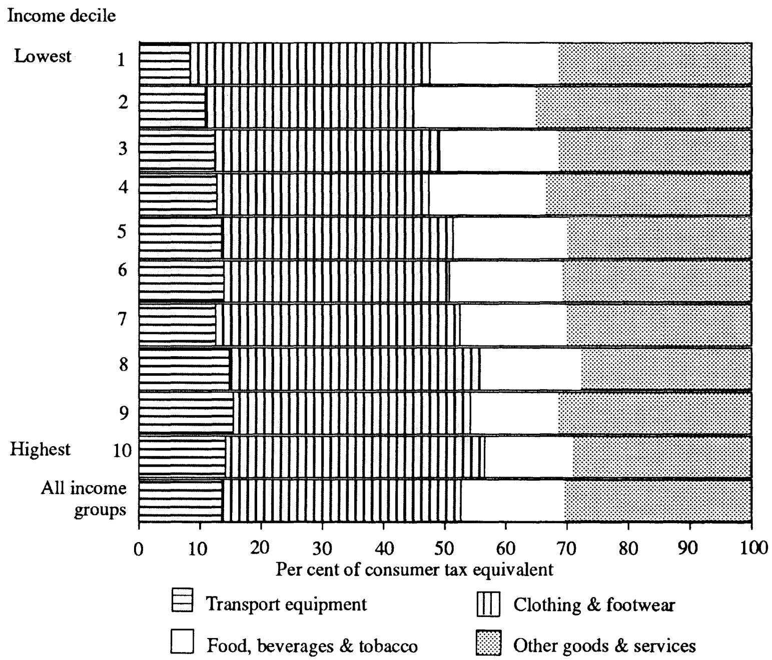
If the consumer tax estimate is expressed as a proportion of recorded expenditure, then a weakly regressive pattern is observed. However, because asset accumulation (for example, through savings, capital gains and employer contributions to superannuation schemes) is likely to increase with income, this estimate will understate the degree of regressiveness.

Taking the estimates together, the consumer tax effect of assistance is regressive.

Composition of the consumption tax

The composition of the taxing effect of assistance by income group is shown in figure A12.4. While on average, transport equipment and clothing and footwear each comprised about 6 per cent of household consumption in 1988–89, they accounted for around 13 per cent and 39 per cent, respectively, of the total taxing effect of assistance. Their contributions to the taxing effect of assistance increased with income reflecting the changes in consumption shares noted above.

Figure A12.4
Composition of the consumer tax effect of assistance: 1988–89

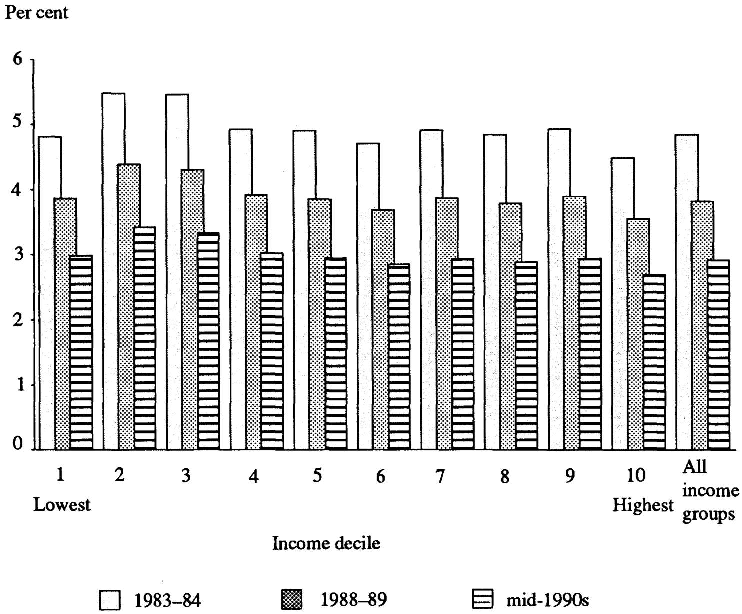


Source: Commission estimates

Trends

The estimated price effects of assistance on expenditure by HES income group in 1983–84 and 1988–89 with projections to the mid-1990s are summarised in figure A12.5 (detailed estimates are shown in table A12.1). Between 1983–84 and 1988–89, the tax effect of assistance on household expenditure declined by about one-fifth, from 4.8 per cent to 3.8 per cent and is projected to decline by about one-quarter to 2.9 per cent by the mid-1990s. The declines in the consumer tax effect of assistance were broadly similar in proportional terms for all income groups.

Figure A12.5
Estimated consumer tax effect of assistance as a proportion of household expenditure: 1983–84, 1988–89 and the mid-1990s



Source: Commission estimates

The projected declines in assistance to the mid-1990s are to be spread more evenly over commodities than occurred between 1983–84 and 1988–89. As a result, the reduction in the taxing effect of assistance will be nearly uniform across all income groups, with fractionally higher reductions for the higher income groups. Thus, the regressive nature of the tax will remain.

The calculated consumer tax equivalents reflect the combined effects of the different expenditure patterns of households in each region and the estimated price effect for each commodity.

Expenditure patterns

The estimates show that there are only very small differences at the broad commodity level in expenditure patterns of households between the States (see table A12.2). The estimates show that around 11 per cent of consumption expenditure is on the relatively highly assisted transport equipment and clothing and footwear items.

Consumer price and taxing effects

As reported above, consumer prices are estimated to have been increased by assistance on average by around 6 per cent in 1988–89 (table A12.2). The proportional price raising effect for each State varied fractionally around the Australian average reflecting the small differences between States in expenditure on goods and services. Nevertheless, it is noticeable that residents of the Northern Territory spend proportionately less on clothing than residents of the other States. This difference flows through to a lower than average price effect.

There is some variation in consumer tax equivalents per person between the States. The largest source of this variation arises from different expenditure levels per capita. For example, NSW and the ACT exhibit about average consumer price effects, but because these regions have the highest expenditure levels per capita, they also show the highest consumer tax equivalents per person. On the other hand, the Northern Territory is estimated to have the lowest consumer tax equivalent per person, reflecting the lowest consumer price effect rather than the level of consumption.[3]

Trends

Estimates of the consumer tax effect of assistance for 1983–84 and 1988–89 with projections to the mid-1990s for Australia and by State and Territory are also provided in table A12.2. As would be expected, the results indicate a progressive decline in the taxing effect of assistance across all States roughly in line with the change for Australia as a whole.

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3 The differences in the tax incidence between States does not provide information about the reasons for different consumption levels per head of State populations from which consumer tax equivalents are derived nor the welfare implications of those assistance tax levels. It should also be noted in interpreting the estimates that expenditure and population are estimated on different bases: consumption expenditure is taken from the national accounts and reflects the location of expenditures but not necessarily the residency of the spenders; and the population estimates relate to the place of usual residence.

Note

The consumer tax equivalent estimates presented in this appendix are not directly comparable with the estimates in table A11.7 because they are:

- derived at the consumer level, whereas the other estimates are derived at the producer and importer level;
- related to private final consumption expenditure, whereas the other estimates relate to all categories of final demand;
- based on expenditure patterns reported in the 1988–89 HES, whereas the other estimates are based on 1983–84 patterns of manufacturing production (complemented by input-output data); and
- referenced to 1988–89 expenditure levels (that is, quantities and prices), whereas the other estimates are based on 1983–84 production levels adjusted annually for price changes only.

Table A12.1

Estimated consumer price and tax effects of assistance by income decile: 1983–84, 1988–89 and the mid-1990s

		Income decile										
		Lowest	*Second*	*Third*	*Fourth*	*Fifth*	*Sixth*	*Seventh*	*Eighth*	*Ninth*	*Highest*	*All groups*
1988–89 Expenditure and population												
Private final consumption expenditure[a]	$m	8 137	10 334	12 119	14 879	17 771	19 286	21 815	24 843	29 648	35 928	194 777
Persons[b]	thousand	819	1 153	1 425	1 573	1 714	1 854	1 938	1 972	2 055	2 195	16 697
Consumption per capita	$	9 936	8 967	8 502	9 462	10 370	10 404	11 255	12 600	14 430	16 366	11 666
1983–84 Assistance												
Consumer price increases	%	5.9	6.2	6.6	6.6	6.6	6.8	7.0	7.3	7.5	7.6	7.0
Consumer tax equivalent	$m	481	636	798	989	1 175	1 310	1 537	1 803	2 238	2 737	13 705
Tax equivalent per capita	$	588	552	560	629	686	707	793	915	1 089	1 247	821
Tax as a proportion of HES income less income taxation[c]	%	15.2	8.2	7.6	7.3	7.0	6.5	6.3	6.2	6.3	5.1	6.4
Tax as a proportion of total household expenditure[d]	%	4.8	5.5	5.5	4.9	4.9	4.7	4.9	4.8	4.9	4.5	4.8
1988–89 Assistance												
Consumer price increases	%	4.7	4.9	5.2	5.3	5.2	5.3	5.6	5.7	6.0	6.0	5.6
Consumer tax equivalent	$m	386	510	628	785	923	1 027	1 211	1 412	1 764	2 170	10 817
Tax equivalent per capita	$	472	442	441	499	539	554	625	716	859	988	648
Tax as a proportion of HES income less income taxation[c]	%	12.2	6.6	6.0	5.8	5.5	5.1	5.0	4.9	5.0	4.0	5.0
Tax as a proportion of total household expenditure[d]	%	3.9	4.4	4.3	3.9	3.8	3.7	3.9	3.8	3.9	3.5	3.8

		Income decile										
		Lowest	*Second*	*Third*	*Fourth*	*Fifth*	*Sixth*	*Seventh*	*Eighth*	*Ninth*	*Highest*	*All groups*
Mid-1990s Assistance												
Consumer price increases	%	3.7	3.8	4.0	4.1	4.0	4.1	4.2	4.3	4.5	4.6	4.2
Consumer tax equivalent	$m	299	397	486	607	707	794	922	1 075	1 336	1 645	8268
Tax equivalent per capita	$	365	345	341	386	412	429	476	545	650	749	495
Tax as a proportion of HES income less income taxation[c]	%	9.5	5.1	4.7	4.5	4.2	4.0	3.8	3.7	3.8	3.0	3.9
Tax as a proportion of total household expenditure[d]	%	3.0	3.4	3.3	3.0	2.9	2.8	2.9	2.9	2.9	2.7	2.9

Note: differences between the sum of components and the total are due to sampling error and rounding.

a Relates to private final consumption expenditure as defined in the Australian National Accounts. Total private consumption expenditure published in the national accounts has been allocated to household income deciles according to the total expenditure for those categories.

b Relates to 'mean resident population' for the year ended 30 June 1989.

c The ABS heavily qualifies its estimates of income as a source of funds that might be used to finance expenditure. Gross income in the survey covers regular receipts and excludes such receipts as lump sum payments, gifts, and windfall gains. Income taxation estimates are qualified as they relate to payments in previous years and do not necessarily reflect the current income earning circumstances of households.

d Household expenditure covers private final consumption of goods and services plus income transfers (such as income taxation, fines, cash gifts and donations, and life assurance premia) and capital outlays (such as mortgage repayments, and alterations and additions to dwellings).

Sources: ABS (1987, 1990a, b, c, d).
Commission estimates.

Table A12.2
Expenditure shares and consumer price and tax effects by State: 1983–84, 1988–89 and the mid-1990s

		NSW	*VIC*	*QLD*	*WA*	*SA*	*TAS*	*NT*	*ACT*	*Australia*
1988–89 Expenditure shares										
Food, beverages and tobacco		0.26	0.26	0.28	0.27	0.27	0.29	0.29	0.25	0.27
Clothing and footwear		0.06	0.06	0.06	0.06	0.06	0.05	0.04	0.06	0.06
Transport equipment		0.05	0.05	0.06	0.05	0.06	0.05	0.05	0.05	0.05
Other goods and services		0.62	0.62	0.60	0.62	0.61	0.60	0.61	0.64	0.62
Total commodity expenditures[a]		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1988–89 Expenditure and populations[b]										
Private final consumption expenditure[a]	$m	72 091	50 642	29 794	17 007	15 028	4 697	1 787	3 731	194 777
Persons[c]	thousand	5 744	4 295	2 788	1 571	1 417	450	156	276	16 697
Consumption per capita	$	12 552	11 792	10 686	10 824	10 606	10 447	11 426	13 508	11 666
1983–84 Assistance										
Consumer price increases	%	7.1	7.0	7.2	7.2	6.9	6.8	6.0	6.4	7.0
Consumer tax equivalent	$m	5 103	3 562	2 145	1 224	1 037	321	107	241	13 705
Tax equivalent per capita	$	888	821	769	779	732	714	687	871	821
1988–89 Assistance										
Consumer price increases	%	5.6	5.6	5.5	5.7	5.4	5.4	4.7	5.1	5.6
Consumer tax equivalent	$m	4 034	2 848	1 632	961	812	255	84	188	10 817
Tax equivalent per capita	$	702	663	585	612	573	566	539	682	648

		NSW	VIC	QLD	WA	SA	TAS	NT	ACT	Australia
Mid-1990s Assistance										
Consumer price increases	%	4.3	4.3	4.2	4.4	4.1	4.2	3.7	3.9	4.2
Consumer tax equivalent	$m	3 070	2 177	1 247	742	622	197	65	144	8 268
Tax equivalent per capita	$	534	507	447	472	439	439	419	523	495

Note: differences between the sum of components and the total are due to sampling error and rounding.

a Relates to private final consumption expenditure as defined in the Australian National Accounts.

b It should be noted in interpreting the estimates that expenditure and population are estimated on different bases: consumption expenditure is taken from the national accounts and reflects the location of expenditures but not the residency of the spenders; the population estimates relate to those resident in the State.

c Relates to 'mean resident population' for the year ended 30 June 1989.

Sources: ABS (1990a, b, c, d).
Commission estimates.

Appendix 13
Budgetary assistance

This appendix provides details of Commonwealth budgetary assistance to industry. It looks at budgetary assistance not only to industries in the manufacturing sector, but also to industries in the agricultural, mining and services sectors. However, it does not cover budgetary assistance provided by State Governments.[1]

A variety of budgetary measures are used to assist industry. Direct financial assistance from the Budget is provided in the form of bounties and subsidies, contributions to research and promotion, export grants, industry adjustment schemes, disease eradication programs, and other payments to (or which benefit) industry. It includes outlays of some departments and government agencies which provide services to industry either free of charge or at prices which do not fully recover the costs involved. Expenditure on items such as the provision of airports and roads, maintaining or improving the defence capacity of industry, and certain expenditures by the CSIRO can also provide assistance to industry.

Apart from these direct outlays, considerable assistance to industry is provided from the Budget through special provisions in the taxation system whereby the Government forgoes collecting revenue from particular sectors or activities. Some of these provisions (for example, the taxation concession for research and development) are of wide application. Others affect only particular industries (for example, the exemption from taxation of income from gold mining, and the averaging provisions for income derived from primary production) or specific activities of particular industries (for example, the immediate deduction for capital expenditure in relation to petroleum exploration). Taxation concessions which are generally available to all taxpayers (for example, the depreciation provisions based on effective asset life plus a 20 per cent loading) are not treated as assistance.

The approach adopted in compiling the estimates of budgetary assistance presented in this appendix focuses on identifying those Commonwealth Government budgetary measures of most direct benefit to Australian industry, especially those which involve direct discrimination between industries or activities.

It is a relatively straightforward exercise to quantify the assistance provided by direct budgetary measures such as bounties and subsidies. But the assistance

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1 Preliminary estimates of State Government budgetary assistance to agriculture for 1984–85 were provided in IAC (1988a).

component of other budgetary measures is often less clear. For example, in the case of expenditure on quarantine and export inspection services, some is covered by revenue derived from industry sources and some is of wider benefit than to individual activities and industries. In such cases, it has generally been possible to derive estimates of net government expenditure (that is, net of industry contributions), but it has not been possible to adjust for any 'spillover' benefits to other activities or to the community generally. In addition, no account has been taken of any economic justification there may be for government funding of particular activities (such as research and extension services) or of the capital nature of some budgetary outlays (such as certain expenditure on research and development and soil conservation).

In compiling the tables in this appendix, it has not always been possible to apportion budget outlays among sectors. Where it has not been possible, the expenditure has been allocated to the sector which would have received the greatest benefit. For example, although the Export Market Development Grants (EMDG) scheme applies to some activities in most sectors, most of the assistance is provided to activities in the manufacturing sector. In that case, because disaggregated data are unavailable, all expenditure on the EMDG scheme is recorded under budgetary assistance to the manufacturing sector (table A13.3).

Further, where budget outlays involve the provision by government of goods and services to the private sector, including the full amount as assistance implicitly assumes that the goods and services are provided efficiently (and that none of the budgetary assistance is appropriated by other sectors). To the extent that this is not the case, budgetary outlays will overstate the assistance received.

Because of the difficulty in identifying how much revenue is forgone under tax expenditure measures, the available data are less up-to-date and comprehensive than for government expenditure. Tax expenditures are therefore not included in the sectoral tables. Some details are, however, reported separately.

Certain categories of expenditure have not been covered, for example, health and education. While most expenditure in these areas is to the providers of the services, its purpose is to subsidise the cost of the service to the consumer. Expenditure on infrastructure which is necessary for the operation of industry, such as airports and roads, has also been excluded, despite the potential for assistance to be provided to industries using these services through the underpricing of such facilities. Any assistance element in these expenditures is difficult to ascertain.

The importance of budgetary assistance

The agricultural and manufacturing sectors are the main beneficiaries of Commonwealth budgetary assistance. Budgetary assistance to agriculture, forestry and fishing is dominated by funding for research (table A13.1). Quarantine and export inspection services, rural industry adjustment measures and international wool promotion also account for a significant proportion of budget outlays on agriculture. In manufacturing, production bounties (in particular those for textile yarns, ships and computers), research funding and export market development grants account for most budgetary assistance (table A13.3).

Budgetary assistance is an important component of total assistance to agriculture. For example, in 1988–89 budgetary assistance to agriculture, forestry and fishing (excluding that from taxation concessions) was estimated at $449 million, compared with assistance derived from domestic pricing arrangements of $404 million (see appendix 9).

However, budgetary assistance to the manufacturing sector is a relatively small proportion of total assistance to that sector. For manufacturing, the gross subsidy equivalent of all measured forms of assistance (including tariffs and quantitative restrictions) was over $11 500 million in 1989–90, compared with budgetary outlays on manufacturing of $829 million (see appendix 11).

The mining sector receives little assistance in the form of direct budget outlays (table A13.2). The same applies to most of the services sector, though the film industry, tourism, railways, and the shipping and waterfront industries are exceptions (table A13.4).

Apart from the taxation concession for research and development (R&D), manufacturing activities have not generally benefited from access to special taxation provisions. Revenue forgone under the R&D tax concession was estimated at $164 million in 1988–89 and $178 million in 1989–90 (see appendix 8).

A variety of taxation concessions apply to agricultural and mining activities. The most notable of these are: the income tax averaging arrangements for primary producers (estimated to cost $280 million in 1987–88); the income tax exemption for gold mining activities which terminates at the end of 1990 ($340 million in 1987–88); and special depreciation provisions for certain capital expenditure (Treasury 1989).

This section summarises the main changes to budgetary assistance measures announced in the 1990–91 Budget, together with other changes introduced during 1989–90. As indicated, further details on some of these changes are included in appendix 7 (sectoral arrangements), appendix 8 (alternative assistance measures) and appendix 15 (recent industry policy reviews and decisions).

Agriculture

Quarantine and inspection services

One hundred per cent cost recovery is to be introduced for *quarantine and inspection charges* from 1 January 1991. Currently 60 per cent of costs are recovered. This measure complements the system of full cost recovery for the inspection of imported foods introduced in January 1990, and is expected to result in revenue savings of $13 million in 1990–91 and $45 million in 1991–92.

Promotion

The Government will provide $25 million to the Australian Wool Corporation for *wool promotion* by the International Wool Secretariat in 1990–91. This assistance is to be extended for another three years at a cost of $30 million in 1991–92, $25 million in 1992–93 and $20 million in 1993–94. The scheme had previously been extended for three years, in January 1988, after a report by the Wool Promotion Review Committee (IAC 1988c, p. 111).

Underwriting

An underwriting payment of $33.8 million was made to the *Australian Wheat Board* in 1989–90. This was a residual payment in respect of the 1986–87 wheat pool.

Export underwriting arrangements for *apples and pears* terminate at the end of 1990.

Research and development

A number of new *research and development corporations* are being established to cover rural, water, soil and forestry research. These corporations will progressively replace various rural research councils and other research programs. The Commonwealth will continue to match rural industries' contributions to research on a dollar-for-dollar basis up to 0.5 per cent of the gross value of production, and to fund land and water resources R&D in full.

Land degradation

From 1990–91 capital costs associated with *land degradation* will be fully tax deductible for all rural businesses earning income from the land. Previously only primary producers could deduct such costs. Included in this measure is any extension (alteration or addition) of fences, primarily for the purpose of land degradation, in accordance with a whole farm plan. Treasury is to review other capital expenditures incurred by business in relation to the environment. The results of this review are to be incorporated in the 1991–92 Budget.

Mining

From 1 July 1991 expenditure on *mine site rehabilitation and the removal of offshore oil platforms*, other than capital expenditure on plant and equipment and on housing and welfare, is to be fully tax deductible in the year incurred. Capital expenditure on plant and equipment is to be deductible in accordance with the general depreciation provisions, while capital expenditure on housing and welfare will not qualify for deduction. These measures are estimated to cost $10 million a year from 1992–93, rising to an estimated $40 million a year early next century when the offshore oil platforms in Bass Strait are removed.

Manufacturing

Bounties

From June 1990 producers eligible for the *textile yarn bounty* can elect for a once-off capitalised grant to be paid in lieu of future bounty receipts, subject to meeting certain criteria (see appendix 7).

The *computer bounty*, which was due to terminate on 5 July 1990, has been extended until 31 December 1995. However, the rate of bounty is being progressively reduced. The bounty is expected to cost $47.2 million in 1990–91. For details of the Bureau of Industry Economics' review of the bounty refer to appendix 15.

The Government has also introduced a bounty on the production of *sensitised photographic film*. Under the bounty, Kodak Australasia will receive $36 million over a three year period (see appendix 7).

General industry development programs

In March 1990 the Government announced its intention to establish up to fifty Cooperative Research Centres over five years (see appendix 8). Expenditure is estimated at $4 million in 1990–91, rising to $55.5 million in 1993–94.

The *National Industry Extension Service* has been extended until 30 June 1995 (see appendix 8). It has been allocated $20 million in 1990–91.

The *National Procurement Development Program* was renewed in 1990 (see appendix 8). Expenditure is estimated at $7.5 million in 1990–91.

The *Management and Investment Companies (MIC) program* provides for a 100 per cent taxation deduction for investments in licensed MICs which invest in approved high technology areas. An annual upper limit of $20 million applies to revenue forgone under the program. The program is scheduled to cease on 30 June 1991.

Export assistance

A modified *Export Market Development Grants (EMDG) scheme* has been operating from 1 July 1990. As grants are made on the previous year's expenditure, payments under the new scheme will not commence until 1991–92 when an estimated $134 million will be paid out. The scheme is supported by an *International Trade Enhancement Program* due to run for four years from 1 July 1990. Some $15.9 million has been allocated to this scheme in 1990–91. Details on these schemes are provided in appendix 8.

Taxes on inputs

As part of the process of removing taxes on business inputs, the *wholesale sales tax exemption for computer hardware* used predominantly in manufacturing has been extended to include: technical design or engineering of goods; the machines, tooling or production required by manufacturers; production-related activities such as the scheduling of production, materials purchasing, storage, handling and despatch of finished goods; and the finalisation of text and artwork included in manufactured printed goods but excluding equipment used by the originators of that material. The exemption has not been extended to items of computer equipment used mostly for marketing, accounting, financial or other general administrative services. The new provisions will apply from the introduction of the new legislation into Parliament and are expected to reduce government revenue by $44 million in 1990–91.

The Government is to undertake a review aimed at simplifying the *wholesale sales tax system.* Further options to relieve the tax on business inputs will be explored as part of that review.

Services

Film industry

The *Australian Film Finance Corporation* is the primary means of providing government assistance to the film industry. Funding for 1990–91 has been increased by $11.2 million to $66.0 million. The Government has decided to extend funding until 1992–93, but at a reduced level of $35 million to encourage the Corporation to seek private funding.

A review of funding arrangements for national interest programs, as well as *Film Australia's* other functions, is to be carried out in 1990–91.

Tourism

A special once-off payment of $31.3 million was allocated to the *tourism industry* in 1989–90 to mitigate the effects of the pilots' dispute. The *Australian Tourist Commission (ATC)* received $18.5 million of this amount. The remaining $12.8 million was allocated to a *tourism recovery package.* This included a generic advertising campaign to promote domestic tourism and a supplement to Tasmania, north Queensland, the Northern Territory and Western Australia for additional tourism promotion.

Following the one-off boost in funding for the ATC in 1989–90, the Government has decided to increase the ATC's base level of funding to $40 million in 1990–91 and to maintain this in real terms. The additional funding is contingent upon a review of the ATC which will address options to increase industry contributions.

Transport

The Government paid $67.6 million to the Civil Aviation Authority and the Federal Airports Corporation as reimbursement for *aviation charges* waived during the pilots' dispute. This resulted from an agreement with the airlines to facilitate the retention of staff during the dispute.

In 1988–89 the Government decided to withdraw from the direct operation of civil airports. In a decision aimed at accelerating that process, the Government has announced it will introduce full cost recovery of *safety and regulatory services* performed by the Civil Aviation Authority from 1 November 1991. This will have no budgetary impact in 1990–91 but will pass costs of $12.5 million onto the civil aviation industry in 1991–92.

In June 1989 the Government announced initiatives aimed at reforming the *waterfront and shipping industries.* Reform initiatives for the *towage industry* were announced in December 1989. The Government has committed funds to these programs for retraining, early retirement and redundancy packages. Expenditure is estimated at $105.6 million in 1990–91. The reform programs are discussed in appendix 7.

Table A13.1
Budgetary assistance to agriculture, forestry and fishing[a]: 1988–89 to 1990–91
($ million)

	1988–89	*1989–90*	*1990–91 [b]*
Agriculture			
Livestock, poultry, etc.			
Australian Animal Health Laboratory	4.7	4.9	5.2
Australian Meat & Livestock Research and Development Corporation	11.9	13.8	14.4
Bovine brucellosis & tuberculosis eradication campaign	9.5	7.9	13.2
CSIRO Institute of Animal Production and Processing	56.5	55.5	65.1
Exotic disease preparedness programs	–	0.2	1.6
International wool promotion	25.0	25.0	25.0
Maintenance of screwworm fly facility	0.6	0.6	–
Meat and livestock industry — marketing innovation	2.5	–	–
Research			
• chicken meat	0.5	0.5	0.7
• dairy	1.5	2.2	4.8
• honey	0.1	0.1	0.2
• pigs	1.3	1.8	2.2
• poultry/eggs	0.3	0.4	0.6
• wool	21.7	20.8	17.1
Crops			
Apple & pear export underwriting	1.8	–	–
Australian Horticultural Corporation	1.6	0.4	1.5
Australian Plague Locust Commission	0.6	0.4	1.0
CSIRO Institute of Plant Production and Processing	69.6	73.3	82.1
Horticultural Research and Development Corporation	0.4	1.2	3.1
Research			
• barley	1.7	2.0	0.1
• cotton	1.1	1.5	2.0
• dried fruits	0.3	0.4	0.5
• grain legumes	0.9	1.2	0.7
• grains (non-wheat)	–	–	2.7
• grapes & wine	0.8	0.9	1.3
• oilseeds	0.5	0.7	0.4
• sugar	1.0	1.5	1.9
• tobacco	0.7	0.8	0.6
• wheat	7.4	9.5	12.0
Sugar industry adjustment assistance	2.9	3.0	0.7
Wheat underwriting	–	33.8[c]	–

	1988–89	1989–90	1990–91 [b]
General agricultural activities			
Australian special rural research fund	4.0	5.0	–
CSIRO Institute of Natural Resources and the Environment	50.4	49.8	57.6
Destruction of recalled organochlorine stocks	1.0	–	–
Farm management advisory skills program	0.2	0.1	0.2
Fertilisers — subsidies to users	4.0	–	–
Innovative agricultural marketing program	2.7	2.5	3.0
Land and Water Resources Research and Development Corporation	–	–	8.5
National soil conservation program	10.6	23.2	21.8
Primary industries marketing skills program	1.0	1.3	1.8
Quarantine & export inspection services	78.1	89.0	72.6
Rural adjustment scheme	34.7	35.1	42.4
Rural counselling program	0.8	0.9	1.0
Rural Industries Research and Development Corporation	–	–	6.4
Water resources — assessment and research grants	7.3	7.4	2.7
Forestry			
Commonwealth/Tasmania forest industry package	8.0	17.2	15.8
National afforestation program	5.3	7.5	2.6
Northeast Queensland rainforests package[d]	4.8	10.6	10.5
NSW Southeast forests package	–	1.7	0.8
Victorian forest industry package	–	–	5.3
Fisheries			
Fisheries research and development	7.9	7.9	9.6
Fisheries surveys & development	0.3	0.2	0.2
	448.5	**523.7**	**523.5**

– Nil.
a Commonwealth Government expenditure net of any industry contributions.
b Budget estimates.
c Residual payment in respect of the 1986–87 wheat pool.
d Business compensation payments have been assumed to be 60 per cent of the total package for 1989–90 and 1990–91.

Source: Budget papers (various years).

Table A13.2
Budgetary assistance to the mining sector[a]: 1988–89 to 1990–91
($ million)

	1988–89	*1989–90*	*1990–91* [b]
Bass Strait freight adjustment scheme for crude oil	3.4	–	–
Coal freight rate efficiency scheme for NSW producers	–	10.0	–
CSIRO Institute of Minerals, Energy and Construction	57.4	56.9	62.5
Joint Coal Board — Commonwealth contribution	2.2	2.3	2.4
National energy research development & demonstration program	11.1	10.6	11.6
Office of the Supervising Scientist of the Alligator Rivers Region Research Institute[c]	1.6	1.8	1.6
Rehabilitation of former uranium mine sites	–	1.0	3.0
Renewable energy research	0.5	0.9	0.7
	76.2	**83.5**	**81.8**

– Nil.
a Commonwealth Government expenditure net of any industry contributions.
b Budget estimates.
c A levy on uranium exports is intended to cover three quarters of the cost of the supervising scientist. One quarter of the cost has been treated as assistance.

Source: Budget papers (various years).

Table A13.3
Budgetary assistance to the manufacturing sector[a]: 1988–89 to 1990–91
($ million)

	1988–89	*1989–90*	*1990–91[b]*
Bounties and subsidies			
Bed sheeting	1.1	1.7	3.0
Books	25.5	24.0	24.2
Computers	31.1	45.0	47.2
Commercial motor vehicles	1.0	–	–
Cultivation machinery	12.0	3.3	–
Fertilisers	12.6	–	–
Grain harvesters	2.6	2.0	–
High alloy steel products	2.2	–	–
Injection moulding equipment	0.1	0.1	–
Metal working machine tools & robots	15.5	12.2	12.9
Printed fabrics	0.9	1.8	1.2
Sensitised photographic film	–	6.0	12.0
Ships	45.0	45.1	37.3
Ship repair	3.2	0.3	–
Steel mill products	3.6	0.1	–
Textile yarns	87.3	90.6	63.8
Textile bounty capitalisation grants scheme	–	59.3	–
Industry specific programs			
CSIRO pulp mill research	–	0.5	1.4
Defence — Australian industry assistance program	41.0	na	na
Heavy engineering adjustment and development program	17.2	9.7	6.0
Information industries strategy	1.9	2.1	–
Information industries — vendor qualification scheme	–	2.1	1.3
Metals-based engineering program	–	2.2	5.4
Motor vehicles and components development grants scheme	8.4	8.3	7.5
National space program	5.4	2.4	6.3
TCF industries development strategy	7.3	5.4	9.9
General industry development programs			
Cooperative research centres	–	–	4.0
CSIRO Institute of Industrial Technologies	55.3	57.1	62.7
Grants for industry research and development	35.0	32.4	31.9
Investment promotion strategy	2.7	3.5	5.5
National industry extension service	17.6	18.8	20.1

	1988–89	1989–90	1990–91 [b]
National procurement development program	3.9	5.6	7.5
Science innovation programs	0.5	0.6	0.6
Technology development programs (including national teaching company scheme)	1.1	1.9	3.0
Export assistance			
Austrade — export and trade promotion	102.1	106.0	105.5
Development import finance facility	42.9	93.3	83.8
Export market development grants scheme	171.0	162.0	131.0
High technology exporters scheme	1.0	–	–
Interest subsidy for financing eligible export transactions	13.3	21.5	13.2
International business development scheme	0.3	1.6	–
International trade enhancement program	–	–	15.9
National export drive	0.4	–	–
	772.0	**828.5**	**724.1**

– Nil.
na Figures are not available.
a Commonwealth Government expenditure net of any industry contributions.
b Budget estimates.

Source: Budget papers (various years).

Table A13.4
Budgetary assistance to the services sector[a]: 1988–89 to 1990–91
($ million)

	1988–89	*1989–90*	*1990–91[b]*
Communications			
CSIRO Institute of Information Science and Engineering	32.5	36.6	37.7
Film industry			
Australian Film Commission — film development, production and marketing support	11.3	11.8	11.8
Australian Film Finance Corporation	70.0	54.8	66.0
Film Australia Pty Limited — production of national interest film and television programs	15.9	5.9	5.6
Tourism			
Australian Tourist Commission	38.2	55.2	39.2
Tourism recovery package	–	12.8	–
Transport			
Australian National Railways Commission — revenue subsidy	51.0	60.3	70.6
Commuter airlines subsidy	0.1	–	–
Domestic airlines — waiver of charges during pilots' dispute	–	67.6	–
Remote air services subsidy	0.9	1.0	1.0
Shipping industry reform	–	7.5	17.5
Shipping — grants for purchase of new or second hand trading ships (contingent on lower crewing levels)	2.9	7.2	24.8
Tasmanian freight equalisation scheme	34.4	36.5	35.2
Tasmanian wheat freight subsidy	–	3.0	3.4
Towage industry reform	–	2.2	5.0
Waterfront industry reform	–	8.2	83.1
	257.2	**370.6**	**400.9**

– Nil.
a Commonwealth Government expenditure net of any industry contributions.
b Budget estimates.

Source: Budget papers (various years).

Appendix 14
Anti-dumping activity

If imported goods are sold on the Australian market below their 'normal value' in the country of export, they can be assessed as being dumped. If the dumping is found to cause or threaten 'material injury' to an Australian industry, anti-dumping action may be taken against those imports.

The current institutional arrangements for the investigation of dumping complaints have been in place since September 1988. Under these arrangements, the Anti-Dumping Authority (ADA) was established for five years, with a review of the effectiveness of the performance of the revised system to be undertaken after three years.

In its first annual report, the ADA stated that:

> 'Australia's anti-dumping policy and legislation both make clear that anti-dumping action will not, and must not, be used as a substitute for industry protection. An Australian industry being damaged by imports at low, but not dumped, prices might wish to seek import protection from the Government — but should not attempt to do so through the anti-dumping and countervailing mechanism, which is aimed solely at preventing material injury being caused by dumping or subsidisation' (ADA 1990, p. 14).

However, whenever anti-dumping action is taken, domestic producers are necessarily protected from import competition. While the system benefits a select few, as with all forms of protection, it imposes costs on other Australian industries and consumers.

This appendix reviews anti-dumping activity over the past year and examines the price effects of some recent anti-dumping actions. It also discusses recent and proposed changes to the anti-dumping legislation.

Anti-dumping activity

During 1989–90 there were only five cases in which dumping duties were imposed or price undertakings accepted from foreign exporters, compared with 15 cases in 1988–89. The number of actions continuing in force fell to 21 at 30 June 1990.

However, the number of anti-dumping complaints formally initiated during the year increased by nearly 50 per cent to 31 cases. This represents a return to the level of complaints experienced in 1987–88, but is still well below that of the first half of the 1980s (table A14.1).

The food and beverages, chemical and petroleum, and basic metal products industries accounted for most of the anti-dumping cases initiated in 1989–90 (table A14.2).

The extent to which anti-dumping action substitutes for other assistance mechanisms depends on the degree to which it insulates the domestic industry from import competition. Anti-dumping actions establish the 'normal value' (or a lower 'non-injurious free-on-board' or NIFOB value) as a floor price for imports by levying a duty equivalent to the margin between the export price and the normal value (or NIFOB).[1] Alternatively, exporters may give a formal undertaking not to price goods below the pre-determined floor price.

An indication of the penalties anti-dumping action imposes on users and consumers of dumped goods can be obtained from examining individual dumping cases. While normal values and NIFOBs generally remain confidential, most ADA reports to date have noted either the dumping margin (that is, the difference between the normal value and the export price) or the extent to which export prices were below the 'non-injurious' value. This is a welcome improvement in the transparency of the anti-dumping process.

In some recent cases where action has been taken against dumped imports, dumping margins have been quite large:[2]

- cement clinker from Korea — export prices were up to 15 per cent below the NIFOB (ADA 1988, p. 34);
- coloured pencils from Brazil, Hungary and Poland — dumping margins were between 29 per cent and 58 per cent for Brazilian products and were 29 per cent and 44 per cent respectively for imports from Hungary and Poland (ADA 1989a, p. 11);
- self-propelled multi-tyred rollers from Czechoslovakia (for use in road making applications) — export prices were lower than the NIFOB by up to 39 per cent (ADA 1989c, p. 19);
- evaporated milk from Canada — export prices were below the NIFOB by margins of 16 per cent to 28 per cent (ADA 1989d, p. 27);
- blacklead pencils from Brazil — the dumping margin was about 46 per cent (ADA 1989e, p. 14); and
- certain outboard motors from Belgium, the USA and Japan — dumping margins ranged from 1 per cent to 47 per cent on imports from Japan, from 3 per cent to 43 per cent for the USA, and from 19 per cent to 40 per cent for Belgium (ADA 1989f, p. 25).

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1 The 'normal value' is generally defined as the price of like goods on the exporter's home market. The 'non-injurious free-on-board' price, or NIFOB, is the price at which goods could be exported without causing injury to the Australian industry.

2 Dumping margins will, however, overstate the penalty imposed by anti-dumping action when that action is based on a lower non-injurious value.

At a time when tariffs are generally being reduced to maximum levels of 15 per cent or 10 per cent, the above cases illustrate the potential for anti-dumping action to provide significant additional protection to local industry against imports from low cost sources.

Abolition of Australia–New Zealand anti-dumping action

Changes arising from the Australia New Zealand Closer Economic Relations Trade Agreement have meant that, since 1 July 1990, anti-dumping measures are no longer available in Australia and New Zealand with respect to goods originating in the other country. With the achievement of full free trade in goods between the two countries from that date, the maintenance of trans-Tasman anti-dumping measures was considered inappropriate. All existing anti-dumping actions between Australia and New Zealand ceased on 1 July 1990. Competition laws now apply to relevant anti-competitive conduct affecting trans-Tasman trade (Duffy and Beddall 1990).

To this end, amendments have been made to the Customs Tariff (Anti-Dumping) Act, the Customs Act and the Anti-Dumping Authority Act. Amendments have also been made to the Trade Practices Act and the New Zealand Commerce Act.

A new section has been inserted into the Trade Practices Act, concerning the misuse of market power by a corporation with a substantial degree of power in a trans-Tasman market (section 46A). Specifically, the new section prohibits a New Zealand based business from using its market power to eliminate or damage an Australian competitor, to prevent entry into an Australian market, or to deter or prevent competitive conduct in an Australian market. The Federal Court of Australia has been granted jurisdiction in such matters. Reciprocal amendments have been made to the New Zealand Commerce Act.

These changes are unlikely to have a major impact on the overall level of anti-dumping activity in Australia. Between 1985–86 and 1988–89 only six anti-dumping cases involving New Zealand goods were initiated (representing only 4 per cent of all cases in that period) (ACS 1989, p. 224).

Other legislative changes

Other recent changes to anti-dumping legislation stem partly from the Government's decision on a review by the ADA of certain aspects of anti-dumping policy and partly from a need to separate the taxing and non-taxing provisions of the legislation into different Acts.

The Government accepted the recommendations of a report prepared by the ADA on guidelines for interpreting certain elements of the anti-dumping legislation (Button 1989a, ADA 1989b).[3] The report dealt with the interpretation and assessment of 'material injury'; the circumstances where a profit margin may be included in constructed normal values; and interpretation of the term 'extended

3 For a discussion of the ADA report, see IAC (1989a, app 9).

period of time'. Ministerial Directions were issued to the ADA and the Australian Customs Service on two of the matters, while legislative amendments were made to put into effect the Government's decision on profit margins in constructed normal values.[4] Irrespective of efforts to reform the legislation and associated regulations, anti-dumping administration must always involve a degree of arbitrariness. It is not possible to define precisely many of the concepts involved.

A substantial number of sections of the *Customs Tariff (Anti-Dumping) Act 1975* have been transferred to Part XVB of the *Customs Act 1901* to avoid possible difficulties with the requirements of section 55 of the Constitution. The difficulties arose from a recent High Court decision extending the interpretation of section 55 — all laws imposing customs duties must remain in an Act separate from laws dealing with 'non-taxing' matters. Hence, all 'taxing' aspects of the dumping legislation remain in the Customs Tariff (Anti-Dumping) Act, but other matters (including the criteria for determining normal values and export prices, and the treatment of sales at a loss) have been transferred to the Customs Act. While these changes do not affect the operation of the anti-dumping system, they do reduce the transparency of the legislation somewhat.

The Garnaut report

A recent report to the Prime Minister by Professor Ross Garnaut (1989) examined the effects on Australia of economic growth and structural change in Northeast Asia and made recommendations designed to ensure that Australia is better placed to benefit from the changes occurring in the region. In part of the report, Garnaut commented on Australia's anti-dumping system.

The report acknowledged that Australia had in the past taken substantially more anti-dumping action than most other countries which took action under the GATT code. It noted that the costs of anti-dumping duties to user industries and to the economy generally are considerable: Australian purchasers pay higher prices for imports; uncertainty in import transactions is increased; and there are heavy regulatory costs. However, the report acknowledged that recent reforms, such as the introduction of sunset provisions, have 'streamlined procedures and made Australia significantly less bureaucratic in the imposition of anti-dumping action' (p. 212).

The report recognised that anti-dumping action can be used to deter imports and can block trade for a period even if no case is ultimately proven. It also criticised the often arbitrary nature of anti-dumping action, citing for example, action against imports from China, where duties are based on cost conditions in a third country

4 Specifically, by amending what was formerly section (5) of the Customs Tariff (Anti-Dumping) Act, and is now section 269TAC of the Customs Act. The Government determined that, in cases where a normal value is to be constructed, a profit margin (which may be zero) may be included in all but one instance. The exception is that, where prices in the country of export have been below cost for an extended period of time (formerly covered by subsection 5(9) of the Customs Tariff (Anti-Dumping) Act, which is now subsection 269TAC(13) of the Customs Act), no profit margin is to be included in the constructed normal value. This provision is to be monitored with a view to taking appropriate action if circumstances warrant any change.

which is not a centrally planned economy. In those cases, anti-dumping duties levied on the basis of a third country may bear little relationship to the cost structure of the centrally planned economy.

The report recommended that anti-dumping procedures for exports from centrally planned economies be reviewed and that 'by the beginning of the twenty-first century, Australia should aim to join the small, high wage, internationally-oriented industrial economies of Europe by avoiding all "anti-dumping" measures' (p. 223).[5]

5 For example, Austria, Finland, Norway, Sweden and Switzerland.

Table A14.1
Anti-dumping and countervailing activity: 1984–85 to 1989–90
(number)

	1984 –85	*1985 –86*	*1986 –87*	*1987 –88*	*1988 –89*	*1989 –90*
New cases[a]						
Cases under inquiry at 1 July	39	63	44	44	19	16
Complaints formally initiated	73	57	43	29	21	31
Provisional measures imposed	28	43	19	16	9	11
Action taken:						
• gazettal	16	21	3	6	10	1
• undertakings	6	10	3	2	5	4
• termination	27	45	37	46	9	23
Cases under inquiry at 30 June						
• Australian Customs Service	63	44	44	19	12	10
• Anti-Dumping Authority	–	–	–	–	4	9
Review cases[a]						
Cases subject to review at 1 July	194	203	183	128	55	24
Gazettals and undertakings	22	31	6	8	15	5
Cases closed by:						
• revocation	13	43	57	51	33	3
• release	–	8	4	30	13	5
Cases subject to review at 30 June	203	183	128	55	24	21

– Nil.
a Cases defined as one commodity by one country.

Source: ACS (1990).

Table A14.2
Anti-dumping and countervailing cases, complaints formally initiated, by industry: 1984–85 to 1989–90[a]

ASIC subdivision	*1984–85*	*1985–86*	*1986–87*	*1987–88*	*1988–89*	*1989–90*	*6 year total*	*Share of total*
	no.	no.	no.	no.	no.	no.	no.	%
Food and beverages	4	4	2	–	3	9	22	8.7
Textiles	–	2	1	–	1	3	7	2.7
Clothing and footwear	1	–	–	–	–	–	1	0.4
Metallic minerals	–	–	–	–	–	2	2	0.8
Paper and paper products	2	–	–	–	–	–	2	0.8
Chemical and petroleum products	21	21	12	9	5	7	75	29.5
Non-metallic mineral products	–	–	–	2	–	1	3	1.2
Basic metal products	10	8	5	8	–	4	35	13.8
Fabricated metal products	4	1	4	–	–	1	10	3.9
Transport equipment	–	2	–	–	–	–	2	0.8
Other machinery and equipment	28	9	17	6	5	3	68	26.8
Miscellaneous manufacturing	3	10	2	4	7	1	27	10.6
	73	**57**	**43**	**29**	**21**	**31**	**254**	**100.0**

– Nil.
a Cases defined as one commodity by one country.
Source: ACS (1990).

Appendix 15
Recent industry policy reviews and decisions

This appendix reports on some recent Commonwealth decisions and inquiries relating to industry policy. In many cases the inquiries have been undertaken by an independent body or chairperson.

The matters reported are:

Rural, mining and construction

- drought relief
- petroleum production taxation arrangements
- LPG controls
- The Pipeline Authority
- major projects approval systems review
- Australian fisheries management
- wool marketing

Manufacturing

- computer bounty
- metal working machines and robots bounty
- removal of customs duties on certain educational, scientific and cultural goods

Transport and communication

- port services prices
- stevedoring and container depot charges
- national rail freight initiative
- Railway Industry Council report
- supply of mobile telephone services
- private telecommunications networks
- Telecom, OTC and Aussat review

Finance

- Australian Industry Development Corporation

Research and development

- funding for research centres

Labour market

- skills formation

Regulation

- books
- record, tape and compact disc prices

Environment

- forest and timber resources
- Kakadu Conservation Zone
- international tropical timber

Parliamentary reviews relating to industry policy

Government initiatives not covered in this appendix, but examined elsewhere in the report include: developments in regulation review (appendix 6); sectoral assistance (appendix 7); alternative assistance arrangements (appendix 8); and inquiry activity and reports of the Commission (appendix 16).

The Drought Policy Review Task Force released its final report on 15 August 1990. An interim report had been released in July 1989 (see IAC 1989a, app 6).

The report focused on the importance of moving away from programs of crisis relief to targeted industry incentives for effective farm management of drought. Schemes based on natural disaster drought relief were considered inappropriate for drought management. The report concluded that 'there is a need for on-going incentives to encourage commercially and environmentally responsible management under variable seasonal conditions'(Drought Policy Review Task Force, vol. 1, p. 6). The task force recommended incentives to encourage the efficient use of soil and water as well as resource management programs and income smoothing policies.

The final report recommended that the Commonwealth Government, together with the State and Territory Governments, implement a national drought policy which focuses 'attention on the respective roles of producers and governments in implementing a self-reliant, risk management approach to drought'(Drought Policy Review Task Force, vol. 1, p. 21). It was also proposed that the Australian Agricultural Council and the Australian Soil Conservation Council establish a Drought Policy Committee to monitor the policy's implementation. The Rural Adjustment Scheme would form the basis for Commonwealth involvement in providing assistance under the national drought policy.

No government decision had been announced as at 20 September 1990.

Petroleum production taxation arrangements

In May 1989 a task force was set up within the Department of Primary Industries and Energy to review the crude oil and liquefied petroleum gas (LPG) excise and royalty arrangements (see IAC 1989a, app 6). The report of the task force has not been released. However, the following major changes to petroleum production taxation arrangements announced in August 1990 were reported to follow consideration of the review (Griffiths 1990a, p. 1).

From the commencement of the 1990–91 financial year, the excise and royalty arrangements in Bass Strait are to be replaced with a resource rent tax (RRT). The RRT for Bass Strait was set at a rate of 40 per cent — the same as for greenfields projects. For RRT purposes, existing production licence areas in Bass Strait and an associated exploration permit area will be treated as one project. All expenditures incurred in the project area before 1 July 1990 will be assumed to have been deducted and will not enter into the calculation of RRT liability.

The excise and royalty arrangements are to be retained for production licences and certain exploration permit areas on the North West Shelf. This decision was based on the large investment incurred over long lead times and the sensitivity of the liquefied natural gas market.

Exploration cost deductibility has been extended from a project to a company basis under the new and existing RRT arrangements. This amendment is intended to remove any disincentive to explore in frontier areas. Development costs will continue to be deductible on a project basis. The threshold rate used to carry forward development costs is to be reduced to 5 percentage points above the long-term bond rate to reflect the lower risk associated with development relative to exploration.

The Minister pointed out that a number of issues relating to State Government involvement in the petroleum industry must still be resolved. These issues include the taxation of onshore petroleum activity and the sharing of revenue with the States.

LPG controls

In October 1988 the Minister for Resources announced that, following the 1988 review of LPG pricing, new arrangements would apply to the LPG industry (Cook 1988). These arrangements involved the Price Surveillance Authority (PSA) determining the maximum wholesale prices of LPG in each capital city and export controls on LPG remaining subject to further review in eighteen months.

Following public concerns in early 1990 about the magnitude and frequency of rises in LPG prices, the PSA conducted a review of LPG pricing arrangements. The report was released on 6 July 1990 (PSA 1990c). The review found that regulation of producer prices may have been causing market distortions to the detriment of consumers.

The report recommended that the PSA should no longer set wholesale prices and should instead undertake active monitoring of wholesale and retail LPG prices.

As foreshadowed by the Minister for Resources, export controls on LPG were reviewed by the Department of Primary Industries and Energy. In undertaking the review the Department entered into extensive discussions with most of the major participants in the industry. Submissions by the public were not requested. Subsequent to this review the Government released a report on LPG and announced new arrangements for export controls on LPG (Commonwealth of Australia 1990b).

The report noted that since October 1988 'Australian producers have continued to export LPG under virtually automatic approval'(p. 12). Even though some domestic supply shortfalls had been experienced, it was considered unlikely that retention of export controls would improve the situation.

Government decision

On the 21 August 1990 the Minister for Resources announced that the LPG industry would be deregulated from 1 January 1991 and that controls imposed on the pricing and export of LPG would be removed. Under the new arrangements, the PSA will increase monitoring of distributor and retail prices of LPG but will no longer set the maximum wholesale price. Exporters of LPG will be required to assure the Government that they will not export LPG to South Africa (Griffiths 1990b).

The Pipeline Authority

In the 1989–90 Budget the Commonwealth Government announced its intention to sell the Moomba to Sydney gas pipeline system, including lateral pipelines — the major assets of The Pipeline Authority. This intention was reaffirmed in the 1990–91 Budget when it was announced that the operations of the pipeline system would be put 'on a proper commercial basis before it is sold'(Willis 1990b). Legislation will be introduced to alter the contractual relationship between The Pipeline Authority and AGL. It is proposed to increase haulage charges by 25 per cent from 1 January 1991 and by a further 25 per cent from 1 January 1992.

The Government is considering two forms of regulating the pipeline system after its sale 'to prevent the new owner of the pipeline system from earning excessive profits by exploiting a monopoly position'(Willis 1990b). The first option is based on limiting increases in the haulage tariff to the Consumer Price Index minus 1 per cent, subject to a cap placed on the maximum rate of return on the owner's equity in the pipeline system. The second option would subject tariff increases to formal determinations by the PSA. The Commonwealth Government's Task Force on Asset Sales has invited interested parties to submit bids on the basis of these alternative regimes. Purchase proposals are to be lodged by 28 September 1990.

The Department of Industry, Technology and Commerce and State and Territory Governments are undertaking a review of approval systems for major projects. Kinhill Engineers has been appointed as a consultant to assist in the review which commenced in June 1990.

The review is: to describe the major project approval systems currently operating both in Australia and overseas; to compare the efficiency and predictability of the Australian system with the systems overseas, including an assessment of the extent to which the Australian approval processes are inhibiting investment; and to assess the extent to which practices in Australia satisfy the legitimate control requirements of governments.

A final report is expected in October 1990.

Australian fisheries management

On 20 December 1989 the Minister for Primary Industries and Energy released the Commonwealth Government's fisheries policy statement which sets out policy changes for managing Australian fisheries (Commonwealth of Australia 1989). Three main objectives were set for the management of fisheries:

- ensuring the conservation of fisheries resources and the environment which sustains them;
- maximising the economic efficiency with which these resources are exploited; and
- ensuring there is an appropriate return to the community from those permitted to exploit community-owned resources for private gain.

A new statutory authority — the Australian Fisheries Management Authority — will be responsible for all Commonwealth fisheries management matters. The fishing industry is to meet the costs of the Authority in proportion to the benefits it receives from fisheries management. The Government commenced recovering a proportion of management costs in 1985–86. By 1989–90 the level of cost recovery had increased from around 38 per cent to 90 per cent. The level of cost recovery is to be reviewed by the Industry Commission before the end of 1991 and every five years thereafter. The operations of the Authority are also to be reviewed by the Industry Commission after the first five years of operation.

The Government announced it was undertaking a complete review of legislation affecting the industry and intends to present revised legislation in the 1990 Budget sittings.

Wool marketing

On 31 May 1990 the Minister for Primary Industries and Energy directed the Australian Wool Corporation to reduce the minimum reserve price of wool from 870 cents to 700 cents a kilogram. The Wool Marketing Act has also been amended to provide a Commonwealth Government guarantee on all borrowing by the Australian Wool Corporation until July 1992 (Kerin 1990a).

The Minister for Primary Industries and Energy also announced a review of the pricing policy of the wool industry. The aim of the review is 'to analyse changes which have taken place since the current arrangements were introduced in 1974 and to recommend measures to make the arrangements more effective'(Kerin 1990a). The Government also indicated that it is 'prepared to review the supply of funds under the rural adjustment scheme, including possible carry on assistance and structural adjustment' (Kerin 1990b, p. 1038).

On 23 July 1990 the Minister for Primary Industries and Energy announced that the review of the wool industry would be undertaken by a three member committee headed by Sir William Vines, a former Chairman of the Australian Wool Commission and a member of the International Wool Secretariat.

The Committee is to examine and recommend ways of improving the efficiency and effectiveness of:

- the procedures and mechanisms for determining the minimum reserve price for wool;
- the role of stockholding in price stabilisation;
- arrangements for processing wool in Australia; and
- the role of the International Wool Secretariat and the relationship between it and the Australian Wool Corporation (Kerin 1990c).

The committee has indicated it will be conducting a series of public hearings in November and December 1990. 'If necessary, a second round of private hearings (public and media not admitted) will be held in order to further explore selected issues' (WRC 1990, p. 7). The Committee said its recommendations on marketing mechanisms and procedures 'will best serve the Australian wool industry in the longer term' (p. 3). A final report is to be presented by 31 July 1991.

Computer bounty

At the request of the Department of Industry, Technology and Commerce, the Bureau of Industry Economics (BIE) undertook a review of the computer bounty. The bounty was scheduled to terminate on 5 July 1990. The terms of reference for the review were outlined in IAC (1989a, app 6). The Bureau's report was released in February 1990 (BIE 1990a).

The BIE assessed the effectiveness of the bounty against the objectives of 'encouraging the development of an internationally competitive industry and the competitiveness of all industry by encouraging the wider application of information technologies' (1990a, p. 1). Against these objectives the study found that the industry receiving the bounty had experienced high growth rates and demonstrated strong research and development and export performance. Australia was also found to be at the forefront with other industrialised nations in taking up computer-based technology.

The BIE recommended that a bounty scheme similar to the *Bounty (Computers) Act 1984* continue to operate from July 1990. The Bureau also recommended that the rates of bounty be set at 17 per cent of value added in 1990–91 and be phased down to 13 per cent of value added in 1992–93. No recommendations were made for the rates of bounty beyond 1993, although the Bureau recommended that the bounty rate be adjusted annually so that the effective rate for the industry maintains its relativity with the effective rate of assistance for the manufacturing sector.

The report also concluded that the value added for calculating bounty entitlements should not be reduced because firms receive assistance under other Commonwealth or State Government programs.

Government decision

On 12 June 1990 the Minister for Industry, Technology and Commerce announced that the Government would introduce legislation to continue the computer bounty scheme. The Government accepted the BIE's recommended bounty rates and proposed further reductions to 11 per cent and 9 per cent of value added from 1 July 1993 and 1 July 1994 to 31 December 1995 respectively (Button 1990e).

Metal working machines and robots bounty

In September 1989 the Department of Industry, Technology and Commerce requested the BIE to review the metal working machines and robots bounty. The bounty which is to terminate on 30 June 1991 is payable, on a factory cost value added basis, to local manufacturers of certain metal working machines and computer controlled machines. For computerised numeric control metal working machine tools and robotic equipment, the bounty is paid at a rate of 28 per cent. For power driven metal working machine tools and for modifications and retrofits, the rate is 20 per cent. The BIE released its report in March 1990 (BIE 1990b). The terms of reference emphasised the development and use of higher technologies in manufacturing, together with the maintenance of a modern viable metal working machines industry. Against these criteria the BIE found that the scheme had been largely successful.

The BIE recommended continuation of the bounty scheme, but paid at a lower rate. It recommended the present rates be phased down to 12 per cent by 1 July 1992 — calculated to yield an effective rate of assistance equal to the manufacturing average (excluding the TCF and PMV industries). For the period after 1 July 1993, it recommended that the rate be determined on the basis that the effective rate of assistance remains in proportion to that for the rest of manufacturing.

No government decision had been announced as at 20 September 1990.

Removal of customs duties on certain educational, scientific and cultural goods

In June 1990 the Government announced its intention to sign the United Nations Educational, Scientific and Cultural Organisation Agreement on the Importation of Educational, Scientific and Cultural Materials (the Florence Agreement) and the Nairobi Protocol to the Florence Agreement (Button 1990f). Signatories undertake to allow duty free entry of goods covered by the agreement. These include stationery, books, publications, documents, works of art, collectors pieces, scientific equipment, visual and auditory materials and goods for the blind and people with other disabilities. In announcing the decision it was noted that 'Books, publications, records, compact discs and a wide range of scientific equipment are [already] duty free. Other goods used within educational institutions attract tariff concessions' (Button 1990f, p. 2).

The Government intends to amend the *Customs Tariff Act 1987* to comply with the Florence Agreement. A working party from the Department of Industry, Technology and Commerce and the Australian Customs Service has been established to implement the Government's decision. The working party has called for comment from interested groups before 15 October 1990. The working party is to report in December 1990.

Port services prices

Two reports related to the pricing of port services were released in April 1990. The Bureau of Transport and Communications Economics' study found that current port prices bear little relation to the costs of providing port facilities and services (BTCE 1989). Australian port authorities rely heavily on cargo charges despite cargo accounting for only a small proportion of port authority expenses. The BTCE concluded that reliance on cargo-based charges should be considerably reduced, with corresponding increases in rentals and ship-related charges. Whilst the BTCE saw some opportunities for increased competition between ports, it considered that the inevitable monopoly position of port authorities necessitated pressure by governments to reduce costs and improve efficiency.

At the time the BTCE study was undertaken, most port authorities were already in the course of preparing reforms. Final proposals of the port authorities have reflected, in part, the BTCE's recommendations. For more information see appendix 5.

The Prices Surveillance Authority report examined a proposal by shipowners to impose a surcharge for cargo handling at Sydney (PSA 1990b). The proposal arose from an alleged high level of congestion. The PSA concluded that such a surcharge was 'not appropriate' and that the cost of delays in Sydney had been taken into account in setting freight rates.

Stevedoring and container depot charges

Stevedoring and container depot charges were referred to the PSA on 24 May 1990 (Crean 1990a). The terms of reference covered the current basis for establishing charges, the appropriate basis for determining whether efficiency improvements resulting from reforms in the industries are reflected in future charges, and the appropriate role for the PSA in ongoing surveillance of charges.

The PSA's report is due in November 1990.

National rail freight initiative

The National Freight Initiative Committee was formed in 1989 to initiate the 'establishment of an efficient national rail freight enterprise(s) providing profitable and competitive interstate services'. Its membership includes representatives from State and Commonwealth rail authorities, private industry and the Australian Council of Trade Unions. The committee commissioned Booz–Allen & Hamilton and Travers Morgan to undertake jointly an initial feasibility study of options for achieving the committee's objectives (Booz–Allen 1990). The consultants considered a range of different institutional structures and concluded that a single enterprise responsible for all national freight could become profitable within a reasonable time and could yield substantial national economic benefits.

The committee subsequently proposed to Commonwealth and State Governments the establishment of a National Rail Freight Corporation (NRFC) which would involve Commonwealth and State equity participation in a company-type corporate body. It is envisaged that the NRFC would commence business from 1 July 1991 and encompass all of the railways' existing interstate business. Any community service obligation would be funded and organised separately. The NRFC's goal would be to earn a rate of return sufficient to fund all investment from non-government sources without reliance on government guarantees.

Railway Industry Council report

The Railway Industry Council released its report in May 1990 (RIC 1990). The council, which includes representatives of State and Commonwealth Governments, rail authorities and unions, was established in 1986.

The report covers a series of potential scenarios for rail provision and compares these with a base case for the year 2001–2 derived from current rail plans. The council concluded that financial break-even for rail freight services would not occur by that time unless specific measures over and above those currently planned or expected are implemented. If current trends and policies continued, then the deficits (in 1986–87 values) would be reduced from the 1986–87 levels of $400 million for non-urban freight and $419 million for non-urban passenger rail to deficits of $60 million and $238 million respectively by 2001–2. Over the same period the deficit incurred on urban rail passenger operations would increase from $948 million to $1003 million (RIC 1990, p. 56).

Australian Industry Development Corporation

The Australian Industry Development Corporation was reorganised on 1 July 1989. The majority of the corporation's business was transferred to a new subsidiary company, AIDC Ltd. The new company has been listed on the Australian Stock Exchange and 30 per cent of its shares are to be offered to the public. The Commonwealth will continue to guarantee borrowings and other obligations entered into by the Corporation before 1 July 1994 (Brown 1989a, p. 1408).

Funding for research centres

The Minister for Science and Technology (Crean 1990b) announced the introduction of a Cooperative Research Centres Program on 28 May 1990 (see appendix 8).

Skills formation

In June 1989 the Employment and Skills Formation Council released its interim report on industry training in Australia. Details of the review were provided in IAC (1989a, app 6). The interim report recommended an enterprise-based internal training levy with a minimum expenditure obligation for training set at 1 per cent of gross wages in 1990–91 and 2 per cent in 1992–93 and beyond. The final report was to be presented in October 1989. However, the Minister for Employment, Education and Training decided that the interim report contained sufficient information and no final report was required.

Government decision

The Government accepted the interim report's recommendation to implement a training levy and from 1 July 1990 all firms with a pay-roll of $200 000 or more are required to spend the equivalent of 1 per cent of their pay-roll on employee training. If employers spend less than the required minimum, the shortfall will be collected in extra tax and used to fund training activities. The training levy is to rise to 1.5 per cent from 1 July 1992 (Dawkins 1990).

In the 1990–91 Budget the Government announced that unemployment benefits would be replaced with a Job Search Allowance and a Newstart allowance. The Job Search Allowance is available for the first twelve months of unemployment and its purpose is 'to support (and require) job search, or involvement in appropriate training or other job preparation activities' (Keating and Willis 1990, p. 3.158). The Newstart allowance is available for those unemployed for more than twelve months. Under the new program, the 'jobseekers will enter into contractual arrangements with the CES whereby income support will be conditional on job search and training activity' (Keating and Willis 1990, p. 3.261). The new arrangements are to commence on 1 July 1991.

Books

The Prices Surveillance Authority released its final report on book prices on 19 December 1989. An interim report was released in August 1989 (see IAC 1989, app 6).

The final report focused on responding to the major issues of concern arising from the Authority's interim report. Issues discussed in the final report include: copyright protection; book prices; and deregulation of the book industry. The final report reaffirmed the interim report's recommendation that the importation provision of the *Copyright Act 1968* be repealed with two exceptions. These exceptions were for pirated editions and books by Australian resident authors for which a separate Australian publishing contracts is held. The Authority recommended that one years notice be given to allow the industry to prepare for competition which is expected to reduce prices and expedite access to new books (PSA 1989).

Government decision

On 21 December 1989 the Government announced proposed amendments to the Copyright Act. The amendments will cause copyright owners to 'lose control over imports for all non-pirate copies of books published in the future'. The exception to this is books published in Australia or published in Australia within 30 days of being first published overseas. The amendments are intended to 'make the flow of overseas books into Australia faster and cheaper' (Keating and Bowen 1989).

Record, tape and compact disc prices

On 12 February 1990 the Minister for Consumer Affairs announced that the PSA would undertake an inquiry into the prices charged for sound recordings in Australia. The issues to be covered in the inquiry include:

- competition and efficiency in the supply of sound recordings and their effects on prices;
- the effect of copyright law on the operations of the sound recording market and the determination of prices;
- the effect of piracy on the production, distribution and pricing of sound recordings;
- the effect of current industry structure and pricing practices on the development of Australia's music;
- the effect of price levels on profitability and employment; and
- the introduction of new technologies such as compact discs, digital audio tapes and their impact on prices (Bolkus 1990).

A preliminary statement of issues was released in July 1990. The final report is to be completed by 1 October 1990.

Forest and timber resources

An inquiry into the options for the use of Australia's forest and timber resources was referred to the Resource Assessment Commission (RAC) in November 1989. The inquiry is to consider 'both the existing management strategies and alternative uses for forestry resources, including the Forestry and Forest Products Industry Council Growth Plan and the Australian Conservation Foundation Alternative Strategy' (Hawke 1989). The RAC has invited submissions from interested parties and is holding public hearings.

The report is due to be completed by 30 November 1991.

Kakadu Conservation Zone

In April 1990 the RAC was requested to conduct an inquiry into the use of the resources of the Kakadu Conservation Zone including Coronation Hill and the El Sherana. The inquiry is to identify and evaluate options for the use of the resources and assess:

- the environmental and cultural values of the Conservation Zone;
- the impact of potential mining operations in the Conservation Zone on those values and on the values of Kakadu National Park;
- the national economic significance of potential mining developments; and
- the interests of Aboriginals affected by any potential mining developments (Keating 1990).

The report is to be completed by 26 April 1991.

International tropical timber

The Department of Arts, Sport, the Environment, Tourism and Territories commissioned Cooper and Lybrand Consultants, in association with Forestry Technical Services Pty Ltd, to conduct a study into Australia's role in the international tropical timber industry (Richardson 1989).

The study is to examine and report on policy options for the importation of tropical timber and look at the international and domestic impacts in both environmental and socio-economic terms. The report is also to make recommendations on how Australia might adjust its role in the international tropical timber industry.

The study was to be completed in early 1990. However, the report had not been released as at 20 September 1990.

In addition to the reports mentioned above, a number of Commonwealth parliamentary reviews relating directly, or indirectly, to industry policy are underway or have been completed. These include:

Senate Standing Committee reviews

- the role of the Commonwealth Government in the further development of the Australian tourist industry;
- the contribution that Australian industry, science and technology can make to reducing the impact of the greenhouse effect;
- the employment of people with disabilities;
- issues central to government consideration of the Very Fast Train proposal;
- *Accommodation for people with disabilities*, report presented 9 May 1990;
- *New management techniques in manufacturing industry — people and technology*, report presented 29 May 1990;
- *Interim report on aspects of the proposal for a Very Fast Train*, report presented 29 May 1990;
- *Priorities for reform in higher education*, report presented 26 June 1990; and
- *Agricultural and veterinary chemicals in Australia*, report presented 31 July 1990.

House of Representatives Standing Committee reviews

- prescription and supply of drugs;
- protection of the coastal environment;
- tourism in the Cocos and Christmas Islands;
- Australian customs service import/export control sub-program;
- Australia, international trade and world debt;
- Australian industry participation in the North West Shelf project — second stage;
- marketing of elaborately transformed manufactures and traded services;
- management of Commonwealth road funding programs;
- research and development in the public sector;
- social responsibilities of statutory authorities and government business enterprises;
- *The discussion paper on review of broadcasting regulation: a critique*, report presented 7 September 1989;
- *The effectiveness of land degradation programs and policies*, report presented 23 November 1989;
- *Rail: five systems, one solution — the efficiency of Australian National's east–west operations*, report presented 27 November 1989;

- *The North West Shelf — a sea of lost opportunities — Australian industry participation in the second stage of the North West Shelf project: first report,* report presented 29 November 1989;
- *To pay or not to pay?: pay television and other broadcasting-related services,* report presented 30 November 1989.
- *Work in progress: award restructuring and industry training*, report presented 21 December 1989; and
- *Small Business in Australia — Challenges, Problems and Opportunities*, report presented 31 January 1990.

Appendix 16
Inquiry activity and reports of the Commission

Table A16.1
Commission inquiry activity[a]: 1987–88 to 1989–90

	1987–88	*1988–89*	*1989–90*
References received[b]	5	5	12
Issues/background papers released	8	7	9
Information/discussion papers released	–	13	6
Public hearings (sitting days)	39	42	74
Participants[c]	572	242	663
Draft reports completed	7	4	4
Reports completed[d]	10	4	9
References on hand (30 June)	3	6	10

a Inquiry activity of the Industries Assistance Commission and the Industry Commission.

b Excludes references received but subsequently withdrawn.

c Number of participants in inquiries for which reports were completed in the year.

d Includes interim reports, reports on parts of references and reports covering more than one reference. Draft reports are listed separately.

Table A16.2
Draft reports published in 1989–90

Title	*Date of release*
Industries Assistance Commission	
Food Processing and Beverages Industries	28.8.89
Apples and Pears (Export Underwriting)	23.10.89
Industry Commission	
Aids and Appliances for People with Disabilities	10.4.90
Product Liability	18.4.90

Table A16.3
Reports completed in 1989–90

Report no.	*Title*	*Date*
Industries Assistance Commission		
419	Disodium Carbonate (Soda Ash)	13.7.89
420	The Dried Vine Fruits Industry	1.9.89
421	Concessional Entry of Aluminised Steel for Use in Mufflers and Exhaust Systems	21.9.89
422	Government (Non-tax) Charges	29.9.89
423	Travel and Tourism	29.9.89
424	Food Processing and Beverages Industries	15.12.89
425	Apples and Pears (Export Underwriting)	19.1.90
Inter-State Commission		
	Waterfront Investigation: Special Studies	August 1989
	Volume Loading of Livestock for Transport by Road	24.11.89
	Road Use Charges and Vehicle Registration: A National Scheme	8.3.90
Industry Commission		
1	Pulp and Paper: Bleaching and the Environment	21.5.90
2	Interim Report on Paper Recycling	21.5.90

Index to Table A16.4

Table A16.4
Stage of completion of inquiries to 20 September 1990 and action taken on those inquiries[a]

25.8.86 ***Reference title*** The rice industry

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1986–87 Annual Report.

Assistance before report

Details were included in the IAC's 1986–87 Annual Report.

Stage of completion

Interim IAC Report No. 396 signed 15.10.86.

The IAC's recommendation and government decision were included in the IAC's 1986–87 Annual Report.

Second Interim IAC Report No. 403 signed 29.5.87.

The IAC's recommendations and government decision were included in the IAC's 1986–87 and 1987–88 Annual Reports respectively.

The Rice Industry, IAC Report No. 407 signed 23.10.87.

The IAC's recommendations, comments and suggestions were included in the IAC's 1987–88 Annual Report.

Government decision

No decision on IAC Report No. 407 had been announced as at 20 September 1990.

25.8.86 ***Reference title*** Fresh fruit and fruit products industries

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1986–87 Annual Report.

Assistance before report

Details were included in the IAC's 1986–87 Annual Report.

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a Includes inquiries of the Industries Assistance Commission, the Inter-State Commission and the Industry Commission for which the recommendations and/or government decisions on reports were not included in previous annual reports. IAC inquiries and reports begun but not completed at the commencement of the Industry Commission Act on 9 March 1990 were transferred to the Industry Commission.

Stage of completion

Interim IAC Report No. 395 on Citrus Fruit signed 10.10.86.

The IAC's recommendations and government decision were included in the IAC's 1986–87 Annual Report.

Interim IAC Report No. 400 on Canned Fruit signed 30.1.87.

The IAC's recommendations and government decision were included in the IAC's 1986–87 and 1987–88 Annual Reports respectively.

IAC Report No. 410 signed 24.2.88.

The IAC's recommendations were included in the IAC's 1987–88 Annual Report.

Government decision

(Minister for Industry, Commerce and Technology and the Minister for Primary Industries and Energy, *Joint Statement*, DPIE/218J, 11.9.90)

The IAC's tariff recommendations had been addressed in the May 1988 Economic Statement.

The Government accepted the IAC recommendation to remove the distinction between local and imported fruit juices in sales tax arrangements. The local content rule under which juice from Australia, Papua New Guinea and New Zealand gains tax advantages over imported juice will be removed from 1 July 1991. The IAC recommendation to remove the partial sales tax exemption for juices containing not less than 25 per cent of fruit juices was rejected. The Government decided to maintain the differential sales tax arrangements whereby beverages containing less than 25 per cent fruit juice are subject to a 20 per cent sales tax, and drinks with a higher juice content are subject to a lower rate of 10 per cent.

The IAC recommended that legislation empowering the licensing of exporters of apples and pears and the control of those exports be rescinded. The Ministers noted that this power now resides with the Australian Horticultural Corporation. The Government would only agreed to export controls that satisfy the objective of ensuring 'horticultural industries achieve their full export potential in overseas markets'.

The IAC recommended the Commonwealth approach the States with a view to implementing strategies for improving efficiency in water supply and use and removing controls over production, land ownership, farm size and the regions where fruit can be grown. The Ministers noted that, constitutionally, these were matters for the States to address but the Commonwealth would encourage State action to remove restraints to adjustment in the irrigation sector.

Other impediments to development identified by the IAC would be brought to the attention of the relevant authorities.

4.6.87 ***Reference title*** Precious metals, gems and jewellery

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1986–87 Annual Report.

Assistance before report

Details were included in the IAC's 1986–87 Annual Report.

Stage of completion

IAC Report No. 412 signed 3.5.88.

The IAC's recommendations were included in the IAC's 1987–88 Annual Report.

Government decision

Under the tariff reduction program announced in the May 1988 Economic Statement, the Government did not propose any additional action on the tariff aspects of this report.

On 18 October 1989 the Treasurer announced that the Government had accepted the IAC's recommendation that the sales tax exemption available to Australian uncut gems and gold coins be extended to comparable imported products. The Government also decided to extend the exemption for imported coins to include all imported coins which are legal tender in the country in which they are minted. (Treasurer, *Press Release*, No. 95, 18.10.89.)

Other aspects of the report not addressed as at 20 September 1990 include recommendations on:

- resource policies,
- certain taxation matters,
- Customs administration and certain tariff-related matters, and
- coin production.

3.12.87 ***Reference title*** Volume loading of livestock for transport by road

Terms of reference

On 24 October 1986 the Federal Minister for Transport directed the Inter-State Commission (ISC) to investigate and identify statutory provisions, regulations, rules and orders, by-laws, policies and practices which may adversely affect the efficiency of interstate land and sea transport of goods and passengers. The first matter investigated by the ISC under this general reference was the uniformity of road vehicle regulation.

During the course of this investigation, the Minister for Transport and Communications, passed to the ISC representations from the Minister for Primary Industries and Energy for it to include an examination of the costs and benefits of the volumetric loading of livestock. The ISC agreed to the request but decided to investigate the matter separately because of the advanced stage of its investigation into road vehicle regulation and because it was concerned that all those with a particular interest in livestock transport should have an opportunity to give evidence.

The investigation of the volume loading of livestock resulted in the ISC's third report under its reference on the efficiency of interstate transport arrangements. The other reports were *An Investigation into the Efficiency of Interstate Transport Arrangements: preliminary report (*August 1987*)* and *Harmonisation of Road Vehicle Regulation in Australia* (June 1988).

Stage of completion

The ISC report *Volume Loading of Livestock for Transport by Road* was signed 24.11.89.

The ISC recommended that the Federal Government and State and Territory Governments permit the optional registration and use of trailers for volume loading of livestock, provided the following conditions are met:

- The tare mass of the trailer (including the stock crate) is 10.0 tonnes or less for semi-trailers and 13.0 tonnes or less for dog trailers.
- The existing 12.5 metre maximum length restriction is not increased to take advantage of the proposed relaxation of the dimension limit on the length of the parallel sides of trailers, unless this is made possible by an increase in mass limits or a further reduction in tare mass.
- The trailer height does not exceed 4.6 metres, but all existing height restrictions are to be observed.
- Trailers are always used with a least four appropriately spaced and constructed pens per deck.
- Trailers used for volume loading may be hauled only with prime movers fitted with speed control devices so that they cannot exceed 95 kilometres per hour.
- Trailers registered in accordance with these requirements are to carry a 'V' plate to identify them.
- Vehicles that include trailers registered for volume loading are not subject to mass enforcement.
- Before implementation,
  - livestock transport associations are to provide a clear indication that their members would make sufficient use of the volume loading arrangements to warrant the introduction of a further regulatory regime;
  - in the interest of uniformity, all jurisdictions are to agree to introduce volume loading as a regulatory regime for livestock transports, in accordance with the foregoing conditions, and to agree to full reciprocity between jurisdictions.

The ISC's supplementary recommendations were that

- authorities consider the applicability of volume loading regimes to vehicles carrying other appropriate commodities, and
- consideration be given to a review of mass and dimension limits and the future role of designated freight routes in order to ensure that full advantage is taken of the productivity benefits to be derived from increasing the load carried by road transport vehicles.

Government decision

Consideration of the ISC report by the Australian Transport Advisory Council has been overtaken by the more recent ISC report on road use charges and vehicle registration (see page..). Final decisions on the volume loading of livestock for transport by road are now expected to await the outcome of decisions on wider issues relating to vehicle charges and registration.

In the meantime, the views of industry and the States and Territories on the ISC recommendations have been sought by the Department of Transport and Communications.

21.6.88 ***Reference title*** International trade in services

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1987–88 Annual Report.

Stage of completion

IAC Report No. 418 signed 30.6.89.

IAC findings:

Although the services sector directly contributes only about one-sixth of Australia's total export earnings, the sector is by far our largest export earner when account is taken of domestically traded services which are 'embodied' in other traded goods and services.

The importance of embodied services

- The greatest potential for improvement in the competitiveness of Australian industry lies in the removal of domestic barriers and impediments to the efficient provision of services that are embodied in other goods and services which are themselves traded or tradeable.
- Regulations and other interventions seriously impede the efficient delivery of domestic transport and communications services which, being embodied services, have a pervasive effect on the viability of using industries, including export industries.
- Substantial economy-wide benefits would accrue from modifying or dismantling domestic barriers and impediments which impinge on the efficiency of these services activities, especially:

- cabotage arrangements affecting coastal shipping and domestic aviation;
- regulations limiting the scope for genuine competition with Commonwealth and State government business enterprises, particularly railways, ports, and telecommunications; and
- the funding of the community service obligations of government business enterprises by cross-subsidisation.

- The Government's program for microeconomic reform will fail to achieve its potential while barriers and impediments to efficient performance in these domestic services industries continue to impose a debilitating burden on the rest of the economy.
- Recent government initiatives, when implemented, should make some progress towards improving competitiveness in the transport and communications industries, but these initiatives are too modest and too heavily influenced by the interests of management and employees within these industries. Particularly in present economic circumstances, the pace and magnitude of reforms should reflect the interests of consuming industries and the economy as a whole.

Directly traded services

- Apart from embodied services, there are services activities entering directly into international trade where barriers and impediments are a major cause for concern. Important among these activities is aviation.
- Most other services which are directly traded in the international market appear to be relatively free of domestic barriers and impediments. These include banking and finance, many business and consultancy services, and a range of personal services.
- There is a substantial weight of opinion that significant opportunities exist to increase exports of health and education services. But there is an inherent conflict between subsidising local consumption of these services and simultaneously promoting their exports. Fundamental changes to regulations and funding arrangements may be needed to achieve a proper balance between subsidised domestic use and the promotion of exports.

Some general issues

- Some more general impediments to international trade in services which warrant continuing examination include:
  - certain selective assistance schemes which discriminate between activities with consequential distorting effects on resource allocation;
  - attitudes and procedures which make temporary migration more difficult, such as recognition of overseas qualifications and the issue of visas;
  - labour market practices such as those which emerge from the monopoly status of certain government business enterprises, cabotage, and from restrictions imposed by professional associations and trade unions; and

- regulations such as those governing local content of television advertising which purport to be made for social or cultural reasons but which are severely protectionist.

- While some recent changes to the taxation system may impede trade in some services activities, given the overall objectives of the system, they have improved efficiency.
- Domestic barriers and impediments to international trade in services which impose high costs on the community should be removed irrespective of actions by other countries, although the gains could be greater if other countries also remove their barriers and impediments to trade.

Government decision

(Advice received from the Treasury, 9.7.90)

It was expected that the Government would draw on this report in considering its agenda of microeconomic reform and in evaluating structural reforms but was not otherwise intending to make discrete announcements on decisions flowing from the report.

References to the Industry Commission on exports of education services and exports of health services have been foreshadowed.

21.6.88 ***Reference title*** Government (non-tax) charges

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1987–88 Annual Report.

Stage of completion

IAC Report No. 422 signed 29.9.89.

IAC findings:

- Business paid approximately $29 billion for government-provided goods and services in 1986–87. This represented about 16 per cent (by value) of intermediate inputs to industry, or around 6 per cent of total costs of production.
- About 80 per cent of outlays are paid to public enterprises for electricity, banking, transport, communication, and water, sewerage and drainage services. In addition, governments are active in the provision of goods and services in many other areas of the economy.
- About half the total revenue from government (non-tax) charges is derived by State Government bodies, 40 per cent by those owned by the Commonwealth Government and the balance by local government.
- The IAC's studies of rail freight services and the electricity supply industry imply that inefficiencies in the production and pricing of goods and services provided by governments are undermining the competitiveness of the

business sector and depressing Australia's gross domestic product by billions of dollars each year.

- Poor performance by public enterprises can generally be traced to some combination of unclear and sometimes conflicting objectives, the absence of effective competition, reliance on ineffective control and performance monitoring mechanisms, and institutional constraints inherent in Australia's federal system of government.
- The widespread failure to expose public enterprises to at least the possibility of competition underlies many of the inefficiencies which characterise the government goods and services sector.
- Progress has been made by a number of governments in improving the performance of their enterprises. In most cases, governments have chosen to rely on administrative reforms.
- Governments at all levels could initiate further action to improve performance. While this could (and should) include continued administrative reforms, the benefits available from improved public enterprise performance are unlikely to be fully realised unless broader approaches are adopted — in particular, dismantling barriers which presently shield many major public enterprises from competition.
- There is evidence to suggest that requirements that public enterprises discharge community service obligations (CSOs) lead to major inefficiencies. If governments continue to insist on public enterprises discharging CSOs — having convinced themselves that this is the most cost-effective way of achieving the social objectives which underlie them — such obligations need to be made explicit and estimates of their costs made public. Adopting alternative ways of discharging CSOs would avoid the need for many current restrictions on competition.
- The possible existence of natural monopoly does not necessarily justify restricting competition for public enterprises. If governments decide to intervene, public monopoly is only one of several possible approaches. Other approaches which retain the benefits of single-firm supply while providing a role for competition are generally to be preferred. Because the feasibility of different approaches will be affected by industry circumstances, a case-by-case assessment is needed.
- In some areas, there are complex issues of relevance to a number of governments. Commonwealth, State and local governments would therefore need to jointly consider implementation processes. Coordinated reviews undertaken by independent bodies will need to focus on broad organisational arrangements, as well as regulatory and implementation issues. Key areas for review are electricity and gas; rail transport; rural water (including irrigation); urban water, sewerage and waste disposal generally; airports and associated services; and workers compensation.

Government decision

(Advice received from the Treasury, 9.7.90)

It was expected that the Government would draw on this report in considering its agenda of microeconomic reform and in evaluating structural reforms but was not otherwise intending to make discrete announcements on decisions flowing from the report.

References on rail transport and electricity generation and distribution were forwarded to the Industry Commission in May 1990 (see pages 275 and 276).

30.6.88 ***Reference title*** Travel and tourism

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1987–88 Annual Report. The Treasurer subsequently extended the reporting date to 30 September 1989.

Stage of completion

IAC Report No. 423 signed 29.9.89.

The IAC found that the main impediments to the development of tourism and its contribution to the Australian economy lie in the provision of transport services. The IAC proposed a strategy for gradually reforming air transport over a five-year period.

Phase 1

Restructuring the Australian industry by allowing greater competition within the same basic system. The following four elements would be tackled simultaneously:

- ensuring that adequate access to domestic terminal facilities is available to new entrants on fair and equitable terms;
- negotiating to relax restrictions on competition and seat capacity on international routes;
- abandoning separation between domestic and international markets for Australian carriers; and
- making greater use of pricing to better allocate demand for airport facilities and reduce congestion.

Phase 2

Introducing greater competition in domestic air transport by extending the Services Protocol of CER to include aviation services and permitting foreign carriers to interline within Australia.

Phase 3

Removing the remaining anti-competitive restrictions within bilateral agreements and removing restrictions on charter operations.

Phase 4

Allowing further competition in the domestic market from foreign airlines by relaxing special foreign investment restrictions on ownership of domestic airlines.

The IAC noted the considerable scope for the States to secure a more efficient land transport system and considered the Commonwealth should push harder for reform initiatives through appropriate intergovernmental committees (such as the Australian Transport Advisory Council).

The IAC drew attention to the need to: improve the transparency of current land use review mechanisms; make environmental impact assessment more predictable and its procedures more comprehensive; make greater use of pricing mechanisms to achieve a realistic value on public lands alienated for tourism developments; ensure developments comply with environmental guidelines; and to manage access to national parks.

The IAC proposed that Commonwealth funding for the Australian Tourist Commission be maintained for five years, at which time there should be a review to determine whether continued assistance would be justified.

Government decision

(Advice received from the Treasury, 9.7.90)

It was expected that the Government would draw on this report in considering its agenda of microeconomic reform and in evaluating structural reforms but was not otherwise intending to make discrete announcements on decisions flowing from the report.

(Minister for Shipping and Aviation Support, *Media Release*, 15/90, 25.7.90)

The Minister announced the introduction of a new peak-period surcharge regime for all aircraft using Sydney (Kingsford-Smith) Airport. The rate and timing of charges will be determined by the Federal Airports Corporation so as to ensure the efficient operation of the airport. The Civil Aviation Authority and airlines are holding discussions on the establishment of an industry schedule coordination committee to try to reduce delays caused by 'cluster scheduling' of aircraft. A new air traffic control priorities system is being considered by the CAA, the industry and unions.

Regulations or by-laws as appropriate will be introduced to enable the FAC to develop and manage a slot system for Sydney Airport. These will enable the FAC to determine the allocation of slots if other announced measures do not reduce congestion to acceptable levels.

1.7.88 ***Reference title*** The dried vine fruits industry

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1987–88 Annual Report. The reporting date was subsequently extended to 1 September 1989.

Assistance before report

Details were included in the IAC's 1988–89 Annual Report.

Stage of completion

IAC Report No. 420 signed 1.9.89.

The IAC recommended that statutory equalisation provisions be withdrawn at the end of the 1994 marketing year.

The IAC further recommended that, in the intervening period:

- statutory equalisation continue unaltered and be subject to an extension of the current arrangement which required that, by 1990, equalised returns may exceed average export returns by no more than 15 per cent;
- the Australian Dried Fruits Corporation's powers to approve agents in export markets be amended to preclude its ability to pursue a policy of approving sole agents in some markets;
- the Australian Dried Fruits Corporation retain its existing structure but operate under the umbrella of the Australian Horticultural Corporation (subject to qualifications expressed in the report);
- underwriting of export returns for sultanas cease at the current expiry date (1990); and
- tariff provisions continue to be subject to reductions as outlined in the Government's May 1988 Economic Statement.

The IAC also drew attention to its comments regarding State Government packing licensing criteria and land use regulations, as well as those in relation to the remaining export controls exercised by the Australian Dried Fruits Corporation.

Government decision

(Minister for Primary Industries and Energy, *Media Release*, DPIE90/173K, 26.7.90)

The Minister announced that the statutory equalisation of domestic and export returns for dried vine fruits would end and that export arrangements for the industry would remain in place under the broad oversight of the Australian Horticultural Corporation. Further details had not been had been announced as at 20 September 1990.

1.8.88 ***Reference title*** Commercial tariff concessions (PVC foam blocks and DC electric motors)

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1987–88 Annual Report.

Stage of completion

IAC Report No. 416 signed 1.2.89.

The IAC's findings and comments were included in the IAC's 1988–89 Annual Report.

Government decision

(Australian Customs Service, *News Release*, 28.5.89)

The Minister for Science, Customs and Small Business announced he had accepted the IAC's findings that no Commercial Tariff Concession Orders should have been made for either the blocks of rigid PVC foam or the DC electric motors under reference.

The IAC had also commented on the need for a public review of the concession system. A reference on the Commercial Tariff Concession and By-law systems was forwarded to the Industry Commission in March 1990 (see page 272).

20.9.88 ***Reference title*** Food processing and beverages industries

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1988–89 Annual Report.

Stage of completion

Interim report on government regulation of packaging and labelling of processed foods and beverages, IAC Report No. 417, signed 24.2.89.

The IAC's recommendations and the Commonwealth Government's decisions were included in the IAC's 1988–89 Annual Report.

Food Processing and Beverages Industries, IAC Report No. 424 signed 15.12.89.

On food regulation, the IAC recommended that:

- The National Food Standards Council formally refer the recommendations of Part I of the report by the Business Regulation Review Unit/Regulation Review Unit of Victoria to the Australian Food Standards Committee, which should submit to the Council reasons for approving or rejecting each recommendation.
- The current system of food composition standards be retained, but be amended in accordance with the recommendations of its report and the ongoing review by the Australian Food Standards Committee.

- Comparisons between foods be permitted in labelling and advertising and, in order to facilitate such comparison:
  - those differences which are the subject of comparisons between foods be clearly labelled, accurate and verifiable;
  - 'foods not elsewhere standardised' may be produced in the semblance of other foods and may be described in a way that is suggestive of other foods;
  - the use of standardised food names be permitted as part of the name of a 'food not elsewhere standardised', and differences from the standard be clearly labelled; and
  - those remaining provisions of the Food Standards Code which restrict the comparison of the characteristics of foods, such as 'low', 'reduced' and 'imitation' be deleted.
- Where the Australian Food Standards Committee considers that the combination of an additive's use in food products and the likely consumption of those products do not indicate a threat to health and safety, the use of that additive not be restricted in 'foods not elsewhere standardised'.
- In respect of both standardised foods and 'foods not elsewhere standardised', limitations on the use of additives be based solely on health and safety criteria.
- The requirement that an additional statement, 'artificially sweetened', be included in the labelling of non-sugar sweetened products be repealed.
- The National Foods Standards Council urge State Governments to repeal elements of the State product acts which duplicate or are inconsistent with requirements in the Food Standards Code.
- The National Food Standards Council:
  - encourage increased dialogue and negotiation between the various committees and applicants for amendments to the Food Standards Code;
  - direct that minority dissension within any committee not be permitted to veto further consideration of amendments to the Food Standards Code; and
  - request the National Health and Medical Research Council to delegate to the Australian Food Standards Committee its responsibility for advising the National Food Standards Council on food standards.
- The National Foods Standards Council urge all States and Territories not currently adopting amendments to the Food Standards Code 'by reference' to do so.
- The National Food Standards Council urge the Victorian and Western Australian Governments to control and coordinate local government food inspection processes.
- A system for coordinating inspection of foods and food processing Australia-wide for compliance with the Food Standards Code be

introduced. This system should encompass the recording of test results in an easily accessible format and the production of statistics which identify high, medium and low risk areas of compliance with food standards.

- Conformity with the State food acts and the associated Food Standards Code be made a requirement of Commonwealth law regulating imports.
- Import inspection be waived if the importer provides adequate certification that each shipment of food conforms to the State food acts and the associated Food Standards Code.
- Item 8A of the Third Schedule of the Customs (Prohibited Imports) Regulations, which prohibits the importation of 'filled milk' products, be repealed.
- Regulation 21 and Schedule 2 of the Commerce (Imports) Regulations be repealed, as well as those parts of the Customs (Prohibited Imports) Regulations which are inconsistent with the State food acts and the associated Food Standards Code.

On export quality controls, the IAC recommended that:

- Exporters be permitted to assume all the risks of gaining access for highly-differentiated foods to overseas markets and, to achieve this objective, export quality controls be removed from such foods where government certification is not required by the importing country.
- In cases where export inspection is voluntary, it be made available (on demand) at full cost by the Australian Quarantine and Inspection Service. Where inspection is compulsory, the Australian Quarantine and Inspection Service should continue to achieve increased efficiency in the provision of services and the Government should adopt an objective that full cost recovery be achieved within five years.
- The Department of Primary Industries and Energy, with a view to facilitating an expansion of exports, examines
  - the scope for the Australian Quarantine and Inspection Service to certify, for export, products from establishments which are not registered for export but which meet the requirements of the Australian domestic market;
  - whether certain products or shipments can be removed from export control orders if there are reasonable guarantees that they will be exported to markets for which government certification is not required by the importing country; and
  - whether a level of processing, and/or differentiation, of meat products can be identified beyond which risks to export markets are minimal. Such products could be removed from export control orders and firms left to agree with their customers on appropriate quality standards.

Government decision

(Australian Health Ministers' Conference, Brisbane 9–10 June 1990, *Media Communique*, Press Release 7)

The Commonwealth has proposed establishing a national food authority under Commonwealth legislation to develop and recommend food standards to the Commonwealth/State National Food Standards Council. Australian Health Ministers have agreed to reform the process for setting national food standards and a negotiation group is to develop a reform program for further consideration by Health Ministers.

Decisions on the IAC's principal recommendations had not been announced as at 20 September 1990.

5.1.89 ***Reference title*** Second review of federal registration charges for interstate vehicles

Terms of reference

The Inter-State Commission (ISC) was directed to review the current levels of charges for the different classes of vehicles registered under the Federal Interstate Registration Scheme (FIRS) and to recommend appropriate charges to operate after January 1990.

In recommending the appropriate levels of charges, the ISC was to take into account:

- the previous investigations undertaken by the ISC on Federal registration charges for interstate vehicles;
- the relative cost recovery and efficiency performance of equivalent rail services;
- all fuel product excise payments made by the road transport industry;
- the levels of cost recovery charges for State and Territory registered vehicles;
- the existing legislation basis for FIRS charges as set out in the *Interstate Road Transport Charges Act 1985*; and
- the work of Australian Transport Advisory Council on road cost recovery.

The ISC was to assess whether the current distribution of charges between prime movers and trailers is fair and efficient.

The ISC was also directed to investigate the basis on which medium and large combination vehicles should be registered under FIRS and to propose appropriate registration charges for such vehicles.

In making its recommendations on future levels of charges the ISC was to have regard to the general level of taxation raised from the road transport industry compared to other industries.

The ISC was to present a final report by 30 September 1989. The reporting date was subsequently extended.

Stage of completion

The ISC's report *Road Use Charges and Vehicle Registration: A National Scheme* was signed 8.3.90.

Summary recommendations

- The FIRS should be replaced by a national scheme for all road vehicles, with the following features: a road use charge with a fuel charge as the principal component and a mass-distance charge for vehicles for which the fuel charge does not recover road use costs; the scheme to operate primarily under federal legislation but to be administered by the States and Territories; the proceeds of the charge to be determined by the federal Minister acting on the advice of an independent body that reviews submissions from the States and Territories and from road users; and the establishment of a single, national vehicle register.
- A vehicle classification for road charge based on axle configuration and nominated gross vehicle mass which is designed to allow the allocation of the charges fairly and efficiently to those vehicles occasioning the costs, which results in heavier charges for trailers.
- In allocating costs to vehicle classes in order to provide a basis for determining charges, the ISC proposed the inclusion of external costs, the non-inclusion of land opportunity costs, the distribution of non-separable costs in proportion to distance travelled and discounts for operators who adopt certain safety standards.
- Imposts on motor vehicle fuel be restructured to be the principal component of the road use charge, to create a clearer distinction between taxes and charges and to enhance the efficiency of collection. The ISC proposed that imposts on diesel fuel be regarded as charges and set at a level to give an efficient balance between the fuel and mass-distance components of the road use charge; that imposts on petrol be regarded as in part a charge and in part a tax; and that the amounts collected by way of charge be returned to the States and Territories for road funding, other than the amount covering external costs.
- Provision be made for 'period' licences (for vehicles normally operated below a particular gross vehicle mass but occasionally carrying a heavier load) and 'transferable' licences for owners of fleets of trailers.
- Rail systems be exempt from paying excise duty on diesel fuel except for an amount designed to compensate the community for external costs.
- Indicative road use charges that would apply under the scheme proposed by the ISC. In general terms, the impact of the scheme proposed is that smaller commercial vehicles would pay less than at present and the heaviest vehicles would pay more. The great majority of operators of all vehicles including private cars would meet all road use charges through payment of fuel charges only. One significant feature is that there would be no mass-distance charges on prime movers (fuel charges cover their costs); any mass-distance charges would be applied to trailers.

- The national scheme be introduced as early as is practicable and that it would not be appropriate to make any interim changes to FIRS.
- Greater transparency (and hence greater efficiency) in road investment programs be achieved through publication of more information and greater public consultation and independent review of projects.
- Payments to the States and Territories of funds collected under the fuel charge component of the road use charge be disbursed as follows:
  - the component to cover external costs should be retained for general revenue purposes, and
  - each jurisdiction should progressively receive the fuel charge revenues in the proportion that the amount of its program to be funded from fuel charges bears to the national total to be funded from fuel charges.
- Federal legislation for a national road vehicle registration scheme should:
  - allow the States and Territories to set specific mass limits that are binding on vehicles for specific purposes (for example, for safety and bridge protection), and
  - provide a uniform set of penalties, including penalties that are adequate deterrents to overloading.
- Further work be done on vehicle mass limits and designated routes, with a view to designating high standard roads for use by vehicles that exceed normal mass and dimension limits, subject to appropriate charges and safety considerations.
- Further research is necessary in a number of areas, including road cost allocation, safety discounts and charging for external effects.

Government decision

On 23 May 1990 the Minister for Land Transport asked Mr Ted Butcher, former President of the ISC, to undertake consultations with governments, road user groups, and the public. Mr Butcher reported to the Minister in July 1990. His report:

- concluded that the principles followed by the ISC are sound;
- concluded that there are regional impacts of the scheme proposed by the ISC that warrant special consideration being given to some vehicle types and to the staged introduction of the charges;
- proposed that by 31 December 1990 the Commonwealth, State and Territory Governments enter into an agreement on the principles of the scheme to apply from 1 July 1991;
- proposed a three-person independent authority established under Commonwealth and State legislation to administer the scheme.

The Minister for Land Transport will obtain the views of his State and Territory colleagues on the Australian Transport Advisory Council before the Commonwealth Government finalises its policy on the proposals.

31.5.89 ***Reference title*** Disodium carbonate (soda ash)

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1988–89 Annual Report.

Assistance before report

Details were provided in the IAC's 1988–89 Annual Report.

Stage of completion

IAC Report No. 419 signed 13.7.89.

The IAC recommended against varying the tariff on imports of disodium carbonate.

However, should the Government wish to offset the increases in protective margins arising from the changes to the Customs valuation procedures, this could be achieved by reducing the General rate of duty to 15 per cent as soon as practical, to 12.5 per cent from 1 January 1990, and to 10 per cent from 1 January 1991.

Government decision

(Minister for Science, Customs and Small Business, *Media Release*, 143/89, 2.11.89)

The Government decided to reduce the general rate of duty as follows:

- 15 per cent, backdated to 1 July 1989;
- 12.5 per cent from 1 January 1990;
- 10 per cent form 1 January 1991; and
- 7.5 per cent from 1 January 1992.

1.6.89 ***Reference title*** Apples and pears (export underwriting)

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1988–89 Annual Report.

Assistance before report

Details were provided in the IAC's 1988–89 Annual Report.

Stage of completion

IAC Report No. 425 signed 19.1.90.

The IAC concluded that underwriting was likely to have only a minimal effect on resource use in the apple and pear industries, that any such effect would not enhance efficiency, that there were more appropriate instruments to achieve income objectives, and that underwriting could act as a tax on domestic consumers.

The IAC recommended that assistance not continue to be provided to underwrite returns to growers from exports of fresh apples and pears beyond the 1990 season.

Although the possibility of an industry-funded scheme remained open, the IAC considered that it would continue several of the drawbacks of a government-funded scheme, and that participation in any such scheme should be entirely voluntary.

Government decision

(Minister for Primary Industries and Energy, *Media Release*, PIE 90/190K, 6.8.90)

The Minister announced that the Government had accepted the IAC's findings and recommendations. The apple and pear export underwriting scheme ceases at the end of 1990.

22.8.89 ***Reference title*** Concessional entry of aluminised steel for use in muffler exhaust systems

Terms of reference

The terms of reference for this inquiry were included in the IAC's 1988–89 Annual Report.

Assistance before report

General tariff of 10 per cent on aluminised steel.

Stage of completion

IAC Report No. 421 signed 21.9.89.

The IAC considered that evidence presented to the inquiry had not established a case on industry policy grounds for a policy by-law, whether or not conditioned by end use. The IAC's preferred option was that no concessional importation be allowed for aluminised steel plates, sheets, hoop, and strip falling within tariff headings 7210 or 7212 of the Customs Tariff.

Government decision

(Minister for Industry, Technology and Commerce, *News Release*, 85/90, 17.8.90)

The Government decided it would allow car muffler manufacturers to import aluminised steel plates, sheets, hoop, and strip free of customs duty.

18.10.89 ***Reference title*** Aids and appliances for people with disabilities

Terms of reference

Aids and appliances for the disabled were referred for inquiry and report by 18 July 1990.

The reference specified that the Commission report on

- the question of tariffs and other measures subject to influence by governments in Australia which affect the availability and costs of aids and appliances for the disabled, and
- the reasons for any high costs of imported aids and appliances within the Australian market.

Stage of completion

IC Report No. 3 signed 18.7.90.

The Industry Commission recommended as follows:

Government provision of hearing aids

- The current segmentation of the market for hearing aids and services between the National Acoustic Laboratories (NAL) and other service providers in the public, non-profit and private sectors be ended, and competition be introduced across the whole market.
- NAL cease to have a monopoly over supply to the Hearing Services Program clientele, and other suppliers of hearing aids and services whether public, non-profit or private be permitted to compete to supply Commonwealth-funded clients of the Hearing Services Program.
- NAL be permitted to compete with other suppliers for non-Hearing Services Program clients provided it is first converted to a government business enterprise operating on a fully commercial basis. It should be separated from the Department of Community Services and Health, and funded by payments for the services it provides to Hearing Services Program clients and from revenue generated from sales to those not eligible for Commonwealth assistance.
- A schedule of fees be established for hearing aids and services provided to adults under the Hearing Services Program. The schedule should apply equally to NAL and other suppliers. Development of the schedule of fees should be guided by the current fitting protocols of a range of suppliers, including NAL. People should be free to choose more expensive services and pay the difference themselves.
- Only medical practitioners and audiologists be eligible to provide hearing aids and services to children (currently defined as persons under 21 years) under the Hearing Services Program. Payments to suppliers for services provided to children be on the basis of full refunds for the cost of hearing aids and services provided.

- Tenders be invited for the provision of non-commercial services provided under the Hearing Services Program, such as visits to schools for the hearing-impaired and special programs for Aboriginal people.
- The proposed collaborative arrangement between NAL and a private sector supplier be set aside.

Government production of artificial limbs

- The Commonwealth cease production of artificial limbs and associated products and services, and dispose of the assets of the Repatriation Artificial Limb and Appliance Centres (RALACs).
- The current restriction on the number of producers permitted to manufacture artificial limbs under the Free Limbs Scheme (FLS) be removed.
- Accreditation of componentry be discontinued. Prescribers and prosthetists should recommend componentry they judge to be most appropriate for individual patients.
- A schedule of fees for each type of standard limb and associated services be developed, with patients free to choose more expensive componentry and pay the difference. The fees would need to be reviewed on a regular basis.
- The Central Development Unit be abolished.

Tariffs on aids and appliances

- The tariff on wheelchairs and other goods falling within Tariff Heading 8713 be set at 15 per cent General on 1 July 1991 and reduced by five percentage points a year until it reaches zero on 1 July 1994.
- The tariff on pacemakers, defibrillators and other goods falling within Tariff Heading 9021.50.00 be reduced to zero on 1 January 1991.
- The Additional Note to Chapter 90 which reads:
  'In 9021, "orthopaedic appliances", in relation to footwear, means footwear made to measure for a specific disorder'
  be deleted from the Tariff.
- The Commonwealth develop proposed rewording of Heading 9021, which covers orthopaedic appliances, for consideration in the current review of Chapter 90 by the Customs Co-operation Council.

Sales tax exemptions

- Item 123 be amended to read:
  'Goods designed and manufactured expressly for, and of a kind predominantly used by, persons with sickness, disease or disablement.'
- The list of goods eligible for sales tax exemption under Item 123A be extended by adding computer equipment used as, or in conjunction with, electronic communications equipment, provided certification is provided by a doctor or therapist.
- The sales tax exemption on motor vehicles under Item 135A of the Sales Tax (Exemptions and Classifications) Act be limited to vehicles which cost less than the 'luxury car' threshold under current income tax arrangements.

An exemption should not be approved if the person concerned has received an exemption in the previous four years. For the sake of consistency, the mobility allowance should not be payable to persons who have claimed the sales tax exemption on a new motor vehicle within the previous four years.

Information

- The Commonwealth provide funding to maintain and disseminate the database currently being prepared by the Independent Living Centre in Melbourne.

The Commission drew attention to:

- its comments on the specifications used by government bodies in inviting tenders for items such as wheelchairs, and on equipment standards; and
- its criticisms of current programs for the provision of aids and appliances to people with disabilities.

Government decision

No decision on the report had been announced as at 20 September 1990.

18.10.89 ***Reference title*** Recycling

Terms of reference

The question of the recycling of products was referred for inquiry and report by 28 February 1991.

The reference specified that the Commission report on

- the current level and possible costs and benefits of recycling, both in terms of economic and environmental considerations, and
- any institutional, regulatory or other arrangements subject to the influence of governments in Australia which affect the incentives to recycle or re-use products, and advise on their effects and on any appropriate changes to these arrangements

Stage of completion

Inquiry in progress. However, as part of the Pulp Mill and Paper Industry Package announced by the Commonwealth Government on 12 December 1989, the IAC was requested to prepare an interim report on paper recycling and to report on the production of paper from unbleached and non-chlorine bleached pulps. Details of these inquiries and reports are provided on pages 270 and 271.

18.10.89 ***Reference title*** Product liability

Terms of reference

The economic effects of proposals advanced in the Australian Law Reform Commission report on product liability and the effects of those proposals on product innovation and insurance charges were referred for inquiry and report by 18 July 1990.

Stage of completion

IC Report No. 4 signed 18.7.90.

Commission findings

In assessing the ALRC's proposals to change Australia's product liability laws, the Commission looked at their likely effects on both economic efficiency and equity. It considered both theoretical and practical arguments and also examined the adjustment costs that would arise if the proposals were introduced.

Longer term efficiency effects

The Commission considered that the ALRC's proposals would more effectively impose liability on producers for loss caused by faulty products, thereby improving the incentives for producers to take full account of the loss their goods may cause.

But in so doing, the proposals would create new inefficiencies. The proposals would impose excessive liability on producers. This raises the possibility that producers would be held liable for more loss attributable to product misuse, despite the provisions in the proposals aimed at ensuring that the way in which a product is used is considered in every product liability action.

Relative to the current law, the proposals would also provide inferior mechanisms for transferring liability for product-caused loss from producers to consumers when:

- consumers know the risks and choose to accept them;
- consumers have a strong desire to accept unknown or ill-defined risks for example, the use of life saving drugs which may have severe side effects, and
- the risks are so remote that, despite careful investigation, discovery would be unlikely before their realisation.

In large measure, these adverse efficiency effects stem from the inadequacies of the defences available to producers under the ALRC's proposals and the absence of a standard of 'defect' when assessing whether a producer was at fault.

The ALRC's proposals would also impose a number of other costs on the community:

- there would be incentives for consumers to use less safe second-hand goods, or to forgo safety enhancing goods altogether, to avoid the price increases for new goods;
- Australia's export competitiveness would be adversely affected, albeit generally in a minor way; and
- the competitiveness of the economy would be reduced if, in addition to receiving safer products and/or better accident compensation, consumers were to receive wage increases to compensate them for higher prices.

Setting the efficiency benefits of the ALRC's proposals against the costs is difficult, but the Commission believed that it is unlikely that either would be major.

Adjustment costs

Implementation of the ALRC's proposals would impose adjustment costs as producers and consumers adapted to the procedures and precedents established under the new regime. The adjustment period could be many years. However, in the Commission's view, the adjustment costs were unlikely to be of major proportions.

Impacts on insurance costs, product innovation and availability

Implementation of the ALRC's proposals would increase product liability insurance charges and hence product prices, but not to the extent forecast by many in the business community. For most products, liability insurance would continue to represent a small proportion of production costs.

The Commission considered that the ALRC's proposals would not, in aggregate, have a major impact on product innovation and availability although, for some products such as pharmaceuticals, the impact could be significant.

Equity effects

The ALRC's proposals would overcome inequities in the current laws stemming from the inferior rights to compensation for non-owners of goods and the difficulties faced by consumers in pursuing legitimate claims for compensation against producers of faulty products.

However, the proposals would exacerbate an existing inequity of low income consumers subsidising the product liability insurance costs of high income consumers. They would also create new inequities by making it more difficult for producers to defend unjustified claims for compensation. The costs of these claims would be borne by consumers as a whole in the form of higher prices.

Overall assessment of the ALRC's proposals

The task of examining the economic effects of the ALRC's proposals raises complex economic and legal issues. It is difficult to quantify the effects of such a major change to the legal system before the proposals have been tested by the courts.

The proposals would bring both efficiency gains and losses. The theory of product liability provides no indication of the magnitude of these gains and losses. Nor does it help in assessing the trade-off between efficiency and equity effects.

Given the longer term efficiency costs, the adjustment costs that a new legal regime would entail, and the evidence that the benefits would be small, the Commission judged that the ALRC's proposals would reduce economic efficiency.

The reform options put forward by inquiry participants from the business, consumer and legal sectors suggested that the more important inefficiencies and inequities which the ALRC's proposals aim to address could be overcome by relatively minor amendments to current laws. This approach would avoid many of the costs which the ALRC's overhaul of the current laws would entail.

For these reasons, the Commission considered that the ALRC's proposals should not be implemented.

The Commission also commented on features that would enhance the efficiency and/or equity of a revised regime.

Government decision

No decision on the report had been announced as at 20 September 1990.

18.10.89 ***Reference title*** Construction costs for major projects

Terms of reference

The construction costs of major plant and equipment were referred for inquiry and report by 18 April 1991.

The reference specified that the Commission:

- report on any institutional, regulatory or other arrangements subject to the influence of governments in Australia which lead to excessive construction costs for major projects or impede the efficient use of resources;
- advise on courses of action to reduce or remove these costs and inefficiencies; and
- have regard to the established social and environmental objectives of governments.

Without limiting the generality of this reference, the Commission is have regard to and report on:

- construction costs for a representative range of major projects as they compare to cost levels for similar projects in competitor countries overseas; and
- the relative importance of construction costs in relation to other establishment costs (for example, equipment, land) of major plant.

Stage of completion

Inquiry in progress.

18.10.89 ***Reference title*** Mining and minerals processing in Australia

Terms of reference

The mining industry (as defined by Division B of the Australian Standard Industry Classification), excluding petroleum and petroleum products, and minerals processing were referred for inquiry and report by 28 February 1991.

The reference specified that:

- the inquiry and report cover value added processing of minerals, including coal, to the unwrought refined metal and alloy stage or the equivalent stage of processing of coal and industrial minerals, and
- the Commission report on any institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use, and advise on courses of action to reduce or remove such inefficiencies.

Without limiting the generality of the reference, the Commission was requested to examine:

- factors affecting minerals exploration and development, including allocation of mineral property rights and construction costs in remote sites,
- operating costs such as energy transport and labour costs (including on-costs) and the availability of these inputs, and
- other factors such as access to technology and the level of research and development which may be impeding the efficiency, international competitiveness and further development of Australia's mining and minerals processing industry.

The Commission is

- to have regard to established social and environmental objectives of governments and ongoing processes, including those before the Resource Assessment Commission,
- to consider the structure and efficiency of Commonwealth and State Government resource taxation and royalty arrangements, and
- to provide advice on the economic costs of different approaches to those objectives consistent with an appropriate return to the community for the exploitation of public resources.

Stage of completion

Inquiry in progress.

28.12.89 ***Reference title*** Pulp and paper: bleaching and the environment

Terms of reference

The following matters were referred for inquiry and report by 30 April 1990:

- the market prospects for, and technical feasibility of, unbleached and non-chlorine bleached paper products;
- community attitudes to the use of unbleached paper products;
- global trends in the substitution of unbleached pulp for bleached pulp;
- the prospects for using non-wood feedstocks in the manufacture of unbleached pulp; and
- available evidence on the environmental impact of alternative bleaching technologies.

At the Commission's request, the Treasurer extended the reporting date to 21 May 1990.

Stage of completion

IC Report No. 1 signed 21.5.90.

The Commission found:

- Unbleached papers and papers bleached without the use of chlorine are already widely used in Australia. Most newsprint, a growing proportion of tissues and the vast majority of papers used in packaging are unbleached or bleached without chlorine.
- Australians are becoming more willing to use unbleached or non-chlorine bleached papers in tissue products and to a lesser extent in printing and writing papers.
- World-wide, non-chlorine bleaching is gaining ground but it is expected that most new pulp mills will still produce chlorine bleached pulp.
- There are firm proposals to produce paper pulp using wheat straw and other non-wood fibres. It is likely that these pulps will have to be sold overseas, possibly at discounted prices.
- While chlorine bleaching leads to some organochlorines being released into the environment, bleaching without chlorine also has adverse environmental effects. The Commission noted that funds for research into the levels and effects of organochlorine discharges were being made available.

Government decision

No decision on the report had been announced as at 20 September 1990.

28.12.89 ***Reference title*** Interim report on paper recycling

Terms of reference

As part of its inquiry into the recycling of products, the Commission was asked to prepare an interim report by 30 April 1990 on the effects of government policies on, and the environmental and economic costs and benefits of, recycling of paper products.

Without limiting its scope, the interim report was to:

- assess the economic prospects for further recycling in Australia based on local waste paper, including the economic viability of green field and integrated developments;
- examine the economic viability of a world scale recycling plant processing imported waste paper, taking into consideration global sources and markets for recycled paper;
- identify the economic, environmental and technological constraints to further recycling, for example segregation of waste paper into grades, removal of impurities, de-inking and treatment of resultant effluent, etc;
- identify products able to be produced, wholly or in substantial part, from recycled paper which satisfy technical requirements of strength, brightness, etc;
- examine community attitudes to the use of various grades of recycled paper products; and
- assess the success of existing government initiatives in promoting waste paper recycling, taking into account the recent report by the Minister for Administrative Services.

At the Commission's request, the Treasurer extended the reporting date to 21 May 1990.

Stage of completion

IC Report No. 2 signed 21.5.90.

The Commission found that low waste disposal charges and wood prices and high transport costs discourage paper recycling in Australia.

Australia recycles about one third of all paper consumed here, with most of it going into packaging papers.

The greatest potential to increase paper recycling is to make newsprint using old newspapers and magazines. If plans of Australian paper companies to produce recycled newsprint go ahead, Australia's recycling rate would rise to about one half.

Recycled newsprint would use less wood and a sixth of the electricity needed for virgin mechanical pulp. It would save tip space. But other environmental benefits in Australia may not be large.

It would do little to save Australian native forests because most wood fibre used in Australian paper manufacture comes from pine plantations, by-products of sawlog production or from sawmill residues. Recycling will either reduce imports of paper or pulp so helping to conserve forests overseas, or result in more wood being left on the floors of Australian forests.

The de-inking process creates salt which can be an environmental problem for inland locations unless action is taken to remove it. Paper recycling may also result in organochlorines including dioxins in paper and effluent.

The report concluded that the important question is not whether recycling rates could be higher, but whether the Australian community would be better off if they were.

Governments can best assist paper recycling by giving attention to the pricing and management of forests and waste disposal. Attempts by governments to push recycling for its own sake through purchasing policies, tax concessions or recycling targets are unlikely to promote efficient recycling. They could increase costs of traditional paper recyclers and increase imports of recycled paper purely to satisfy the regulations.

Government decision

No decision on the report had been announced as at 20 September 1990.

19.2.90 ***Reference title*** The commercial tariff concession and by-law systems

Terms of reference

The question of whether concessional entry not specified in Schedules 3 and 5 to the Customs Tariff Act 1987 should be provided for imports into Australia and, if so, the appropriate framework for concessional entry and the circumstances in which it should be granted were referred for inquiry and report by 8 March 1991.

The Commission is to report on the effect of the current Commercial Tariff Concession System on the development of efficient, internationally competitive Australian industries, and for the economy generally.

Assistance aspects

Australia's import concession systems allow goods to be brought into the country at lower rates of duty than prescribed in the general Customs Tariff.

The various types of goods and/or users entitled to concessions are identified in the Items in Schedule 4 to the Customs Tariff Act. Under four of the items, the Commercial Tariff Concession System allows for the duty-free admission of imports where no protective purpose is served by the substantive tariff. The other Items — collectively called the By-law System — give effect to a wide range of other government policies for concessional entry.

Stage of completion

Inquiry in progress.

10.5.90 ***Reference title*** Automotive industry

Terms of reference

The automotive industry was referred for inquiry and report by 31 December 1990. The inquiry covers the passenger and light commercial vehicle sectors and the component sector including both original and aftermarket components;

The report and recommendations are to cover assistance arrangements for the industry from 1993 to 2000 and to include any factors, including institutional, regulatory or other arrangements affecting the competitiveness of the industry.

Without limiting the scope of the reference, the Commission is to have regard to the Government's desire:

- to have a viable and internationally competitive industry;
- to provide better quality, reasonably priced vehicles to the Australian consumer;
- to lower the level of assistance to the automotive industry;
- to provide as far as practicable equality of assistance between the vehicle assembly industry and the component manufacturing sector; and
- to simplify the administration of assistance arrangements for the industry

and, in the inquiry and report, have regard to:

  - the large investment required to ensure a viable and competitive motor vehicle industry in Australia;
  - the lead times associated with the industry and the industry's desire for a stable planning environment and for a manageable rate of change;
  - the cost of protection to consumers of automotive products;
  - the importance of further rationalisation to improved efficiency and productivity within the industry;
  - the measures which enable the industry to concentrate on areas of greatest comparative advantage and to take advantage of opportunities arising from globalisation of the automotive industry;
  - the importance of volume to achievement of further economies of scale and better capacity utilisation necessary for international competitiveness;
  - the importance of accelerating moves by the industry toward international best practice, including but not limited to, areas of training and skills development, quality, technology employed and industrial/human resource relations; and
  - the tooling and technology requirements of the industry.

Assistance before report

The current assistance plan for the passenger vehicle industry is due to terminate at the end of 1992. Current arrangements for passenger and light commercial vehicle and component production comprise:

- a tariff of 40 per cent on passenger motor vehicles and derivatives which is reducing to 35 per cent by January 1992; tariffs on non-derivative light commercial vehicles and four-wheel drive vehicles of 18 per cent which are reducing to 15 per cent by January 1992; and tariffs on replacement and after-market components which are reducing to 15 per cent by 1 July 1992;
- entitlements for passenger vehicle producers to import vehicles and components worth up to 15 per cent of total production value duty free (since 1989 assistance to local component production has been provided by a tariff on imported content in excess of the 15 per cent duty free entitlement — this tariff is currently 40 per cent and is reducing to 35 per cent by 1992);
- export facilitation provisions which allow firms to import additional duty free components or vehicles in return for automotive exports different provisions apply to vehicle producers, component producers, and vehicle importers;
- specification of a target structure for the passenger vehicle industry by 1992 of at most three manufacturing entities producing at most six vehicle models — penalties for low volume production are in place to facilitate achievement of that target;
- an Automotive Industry Authority with monitoring, advisory and administrative functions;
- adjustment assistance for industry employees under the Labour Adjustment and Training Arrangements scheme and funding of $83 million between 1985 and 1989 under the Motor Vehicles and Components Development Grants Scheme.

Stage of completion

Inquiry in progress.

20.5.90 ***Reference title*** Statutory marketing arrangements for primary products

Terms of reference

Statutory marketing arrangements for primary products (at the Commonwealth, State and Territory level), excluding mining and forestry, were referred for inquiry and report by 21 March 1991.

The Commission is to report on institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use, and advise on courses of action to reduce or remove such inefficiencies.

Without limiting the scope of the reference, the Commission was requested give priority to areas where greatest efficiency gains are in prospect, and areas where early action is practicable, having regard to:

- the identification and evaluation of the objectives of statutory marketing arrangements for primary products, including arrangements that regulate marketing or establish, or facilitate the establishment of, organisations to undertake or provide services to facilitate marketing;
- whether there are more efficient ways of achieving the objectives evaluated as sound; and
- the benefits and costs of introducing more efficient marketing arrangements.

The Commission is to have regard to the established economic, social and environmental objectives of governments and is to avoid duplication of recent substantive studies undertaken elsewhere.

Stage of completion

Inquiry in progress.

20.5.90 ***Reference title*** Rail transport

Terms of reference

Railway systems (including carriage of urban and non-urban passengers and freight) were referred for inquiry and report by 21 August 1991.

The Commission is to report on institutional, regulatory or other arrangements subject to influence of governments in Australia which lead to inefficient resource use, and advise on courses of action to reduce or remove such inefficiencies.

Without limiting the scope of the reference, the Commission was requested to give priority to areas where greatest efficiency gains are in prospect, and areas where early action is practicable, having regard to:

- the scope for improving the efficiency of rail transport systems including through changed management and work practices, pricing, the removal of structural impediments and the use of, and investment in, new technology;
- alternative efficient sources for infrastructure and other capital investments and any efficiencies arising from the adoption of alternative mechanisms for raising loan and/or equity funding;
- the potential for joint development as a means of reducing operating expenses and capital costs, including the opportunities to standardise equipment to benefit from the lower costs of mass production;
- the identification of efficiencies in the use of energy and land of rail transport compared with road transport;
- the benefits and costs of possible changes in regulation of rail transport including its likely effects on industry, roads, road safety, the environment, regional areas and funding requirements of the three levels of government;
- the appropriateness of rates charged by relevant rail authorities for transport of commodities including the structure of royalties and taxes, and the effect of rail freight charges on industry;

- implications for rail transport services and the economy generally of regulations, charges and arrangements affecting competing and complementary modes of transport; and
- the effects on users and non-users of improved efficiency of passenger rail systems (particularly in cities) and of freight rail systems.

The Commission is to have regard to the established economic, social and environmental objectives of governments and is to avoid duplication of recent substantive studies undertaken elsewhere.

Stage of completion

Inquiry in progress.

20.5.90 ***Reference title*** Energy generation and distribution

Terms of reference

The generation, transmission and distribution of electricity and the transmission and distribution of gas, excluding tax, resource rent and royalty issues relating to gas, were referred for inquiry and report by 21 May 1991.

The Commission is to report on institutional, regulatory or other arrangements subject to influence by governments in Australia which lead to inefficient resource use, and advise on courses of action to reduce or remove such inefficiencies.

Without limiting the scope of the reference, the Commission is to give priority to areas where greatest efficiency gains are in prospect, and areas where early action is practicable, having regard to:

- the scope for improving the efficiency of electricity generation, transmission and distribution and gas transmission and distribution including through changed management and work practices, the removal of structural impediments and the use of, and investment in, new technology;
- the scope for rationalisation of electricity and gas supply between the various authorities, for example by interconnections between systems;
- whether generation, transmission and distribution activities should be subject to control by the one organisation within a region;
- whether electricity and gas retailing is most appropriately performed by a central authority or by a number of distributors;
- practical issues which may apply to the introduction of more efficient pricing policies;
- alternative efficient sources for infrastructure and other capital investments including any efficiencies arising from mechanisms for raising loan and/or equity funding;
- the potential for additions to generating capacity, including from privately owned sources;

- the appropriateness of various loan management and energy conservation initiatives to enhance efficiency of supply and use of energy; and
- the relative efficiency and cost effectiveness of options to reduce the environmental impact of burning fossil fuels.

The Commission is to have regard to the established economic, social and environmental objectives of governments and is to avoid duplication of recent substantive studies undertaken elsewhere.

Stage of completion

Inquiry in progress.

Appendix 17
Publications issued by the Commission in 1989–90

Details of publications of the Commission in 1989–90, other than reports arising from the inquiry program, are provided below.

Information papers

Assistance under the passenger motor vehicle plan, Information Paper, AGPS, Canberra, May 1990.

Inquiry information/discussion papers

Government (non-tax) charges

Workers' compensation arrangements in Australia, Information Paper No. 7, July 1989.

Identification and measurement of cross subsidies, Information Paper No. 8, July 1989.

Survey of government charges on business, 1987–88, Information Paper No. 9, July 1989.

Product Liability

M G Porter, *New Zealand's no fault accident compensation scheme*, report to the Industry Commission, 1990.

R L Somers, *Product-caused injuries in Australia*, report to the Industry Commission, 1990.

Working papers

Using input–output analysis and multipliers, Working Paper No. 12, August 1989.

D Darbyshire, G Davis, R Bendall, R Kolednik, *Government intervention in plantation forestry*, Working Paper No. 13, December 1989.

Business Regulation Review Unit/Office of Regulation Review

Submissions to Australian Broadcasting Tribunal:

> Inquiry into Local Content in Programming, August 1989;
>
> Inquiry into Local Content in Advertising, March 1990; and
>
> Inquiry into Advertising Time on Television, April 1990.

Submission on the Ministerial Working Party Report on Gas Regulation in New South Wales, December 1989.

While not being publications of the Commission, the following papers arising from the IMPACT Project were also published during the year:

OP–69 M Rimmer, *Primary factor substitution in manufacturing and real wage explosions*, November 1989

OP–70 M Horridge, A A Powell and P J Wilcoxen, *Constraining output responses in long-run closures of ORANI: some suggestions,* May 1990

IP–41 B F Parsell, A A Powell and P J Wilcoxen, *The effects of fiscal restraint on the Australian economy as projected by the Murphy and MSG models: a comparison*, July 1989

IP–42 N Agrawal, *Tariff reform and the distribution of household incomes*, August 1989

IP–43 N Agrawal, *Protection as a tax on consumers: who bears the burden?* August 1989

IP–44 B F Parsell, A A Powell and P J Wilcoxen, *The reconciliation of computable general equilibrium and macroeconomic modelling: grounds for hope?* December 1989

IP–45 P J Wilcoxen, *Intertemporal optimization in general equilibrium: a practical introduction*, December 1989

IP–46 P J Wilcoxen, *Supply elasticities in the presence of adjustment costs*, March 1990

IP–47 P J Wilcoxen, *A fast algorithm for solving rational expectations models*, April 1990

G –92 P S Dee, *Economic effects of public expenditure reduction: a strategic role for labour market flexibility*, September 1989

G –93 M Bini and P J Wilcoxen, *Characteristics of mining in Australia,* May 1990

M Kenderes, *IMPACT documentation: first fifteen years, 1975–1989 a listing of papers with abstracts*, February 1990.

Appendix 18
Administrative matters

The following information on the Commission's operations is provided in accordance with section 25(6) of the *Public Service Act 1922.*

The Treasurer announced the creation of the Industry Commission in the budget speech of 1989. The *Industry Commission Act 1989* was proclaimed on 9 March 1990. This Act repealed the *Industries Assistance Commission Act 1973* and parts of the *Inter-State Commission Act 1975.*

Objectives and structure of the Industry Commission

Following the formation of the Industry Commission from the amalgamation of the Industries Assistance Commission, the Inter-State Commission and the Business Regulation Review Unit, the Commission decided to develop a new corporate logo to enhance its corporate image and establish a corporate plan which would encapsulate the objectives of the Commission and how it was going to achieve its mission.

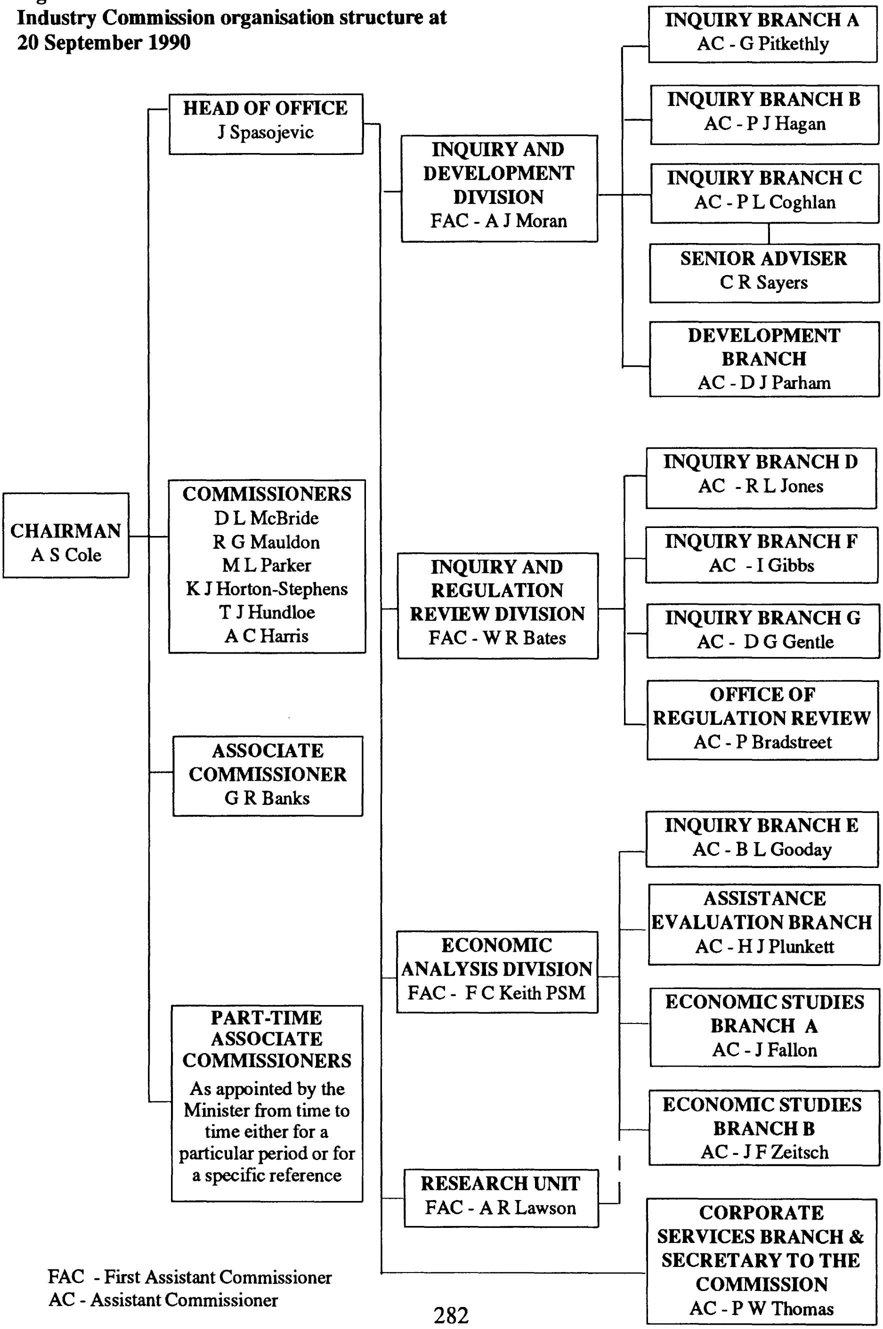
The corporate plan is in the final draft stages and is included as annexure 1 to this appendix.

The current organisation structure of the Commission is provided in figure A18.1.

The matters reported in this appendix are:

- membership of the Commission
- staffing
- performance evaluation
- devolution
- property
- industrial democracy
- occupational health and safety
- EEO
- FOI
- human resource development
- regulations and use of statutory powers
- purchasing reform plan
- use of consultants
- financial management.

Figure A18.1
Industry Commission organisation structure at 20 September 1990



FAC - First Assistant Commissioner
AC - Assistant Commissioner

Chairman and Commissioners

The current full-time membership of the Commission is as follows:

		Period of appointment	
Name	*Position*	*From*	*To*
Mr A S Cole	Chairman	9.3.90	22.8.94
Mr D L McBride	Commissioner	9.3.90	30.6.91
Dr R G Mauldon	Commissioner	9.3.90	31.12.94
Dr M L Parker	Commissioner	9.3.90	8.3.95
Mr K J Horton-Stephens	Commissioner	9.3.90	8.3.95
Dr T J Hundloe	Commissioner	16.5.90	15.5.92
Mr A C Harris	Commissioner	16.5.90	15.5.95
Mr G R Banks	Associate Commissioner	9.3.90	8.3.95

Dr T J Hundloe had been the Director of the Institute of Applied Environmental Research, Griffith University, Queensland, before his appointment as a Commissioner on 16 May 1990.

Mr A C Harris had been Deputy Secretary, Department of Immigration Local Government and Ethnic Affairs before his appointment as a Commissioner on 16 May 1990.

Mr A W Mumme's term of appointment as a Commissioner expired on 29 September 1989.

The appointments under the Industries Assistance Commission Act for Messrs Cole, McBride and Horton-Stephens and Drs Mauldon and Parker expired on 8 March 1990. All were reappointed under the Industry Commission Act on 9 March 1990.

Mr G R Banks was appointed as full-time Associate Commissioner on 9 March 1990. Before his appointment Mr Banks was Projects Director, Centre for International Economics.

Part-time Associate Commissioners

The following part-time Associate Commissioners were employed for the duration of particular inquiries from the dates shown.

Name	*Reference*	*Commenced*	*Completed*
Prof R J Blandy	Mining and minerals processing	9.3.90	
Mr R J Cameron	Food processing and beverages industries	12.10.88	15.12.89
Mr J G Carey	The dried vine fruits industry	3.4.89	1.9.89
	Government (non-tax) charges	3.4.89	29.9.89
Mr D R Chapman	Pulp and paper: bleaching and the environment	9.3.90	21.5.90
	Interim report on paper recycling	9.3.90	21.5.90
	Recyclings	9.3.90	
Dr C Gellatly	Statutory marketing arrangements for primary products	12.6.90	
Dr G D McColl	Government (non-tax) charges	21.6.88	29.9.89
Mr C W Meares	Government (non-tax) charges	21.6.88	29.9.89
Mr G K R Reid	Rail transport	12.6.90	
Mrs H A Rolfe	The commercial tariff concession and by-law systems	11.5.90	
Mr N Sarah	Travel and tourism	18.7.88	29.9.89
Mr W I Scales	Automotive industry	26.4.90	
Mr E Sieper	Construction costs of major projects	9.3.90	
Mr B Smith	Mining and minerals processing	9.3.90	
Mr A J Webb	Energy generation and distribution	29.6.90	
Dr R J Whitelaw	Product liability	9.3.90	18.7.90

Messrs Carey, Meares, Sarah and Cameron and Dr McColl completed their terms of appointment with the Industries Assistance Commission on 29 September 1989.

Mr G K R Reid, a member of the Inter-State Commission, was also appointed to the Industry Commission on 12 June 1990 for the duration of the rail transport inquiry.

The terms of appointment of Prof Blandy, Dr Whitelaw and Messrs Sieper and Smith under the Industries Assistance Commission Act expired on 8 March 1990. They were reappointed to the Industry Commission on 9 March 1990.

Staffing: Office of the Industry Commission

As at 30 June 1990 there were 220 staff employed by the Commission. All were employed under the *Public Service Act 1922* and on the following basis:

female –	full-time	87
	part-time	7
male –	full-time	123
	part-time	3

The staffing profile of the Commission at 30 June 1990 is shown in figure A18.2. During 1989–90, 34 permanent staff (14.1 per cent of the average staff level) left the Commission as a result of 10 promotions and 10 transfers to other Commonwealth agencies, 13 resignations and one retirement.

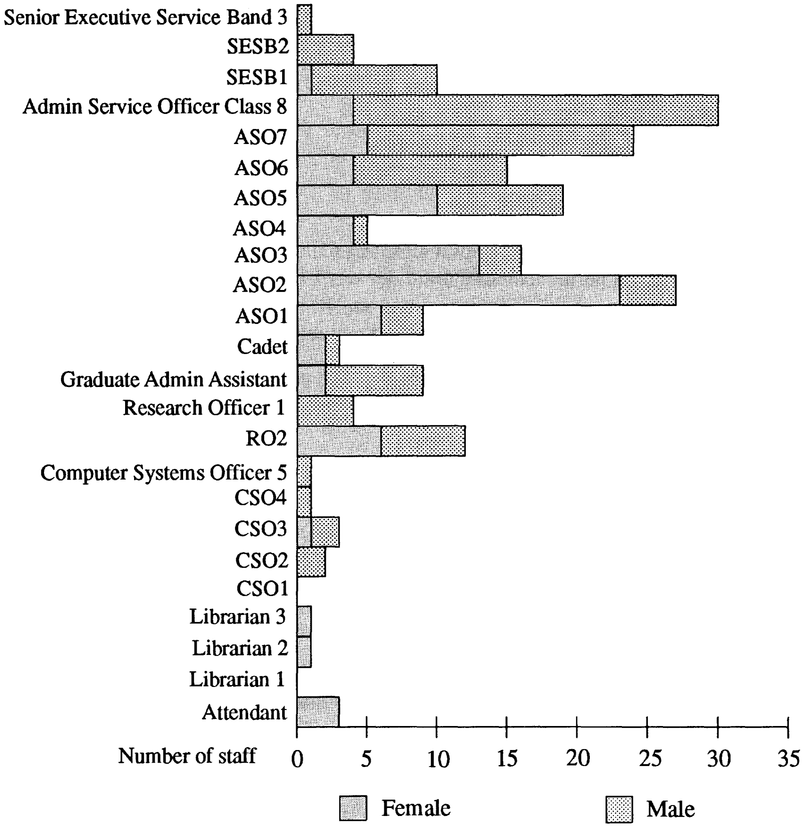
The Commission engaged 20 males and 12 females on a permanent basis during 1989–90. Fifteen temporary staff were engaged during the financial year of which five were female.

Problems have still been experienced, however, in attracting suitably qualified staff to the Commission. Actions have been taken to improve retention rates, for example, by providing more support and guidance to graduate economists from interstate and enhancing the role of the Graduate Recruitment Committee with regular visits to campuses around Australia to interview prospective employees.

Table A18.1
Average staffing levels for Public Service Act staff

	1988–89	*1989–90*	
		to 9.3.90	*from 9.3.90*
Business Regulation Review Unit	4.0	4.0	–
Industries Assistance Commission	204.0	210.1	–
Inter-State Commission	15.5	15.1	–
Industry Commission	–	–	229.0

Figure A18.2
Staffing profile of the Office of the Commission at 30 June 1990



Performance evaluation

As an advisory body to government, the performance of the Commission is best judged on the quality of its reports and the effectiveness of the recommendations contained in those reports.

To more easily assess its performance, the Commission is improving the collection of information on reaction to its reports. In addititon to monitoring government responses to its reports, the Commission has started to build a database on public and media reaction to the Commission's recommendations.

In keeping with Public Service-wide moves towards performance assessment, the Commission has implemented a scheme to monitor the performance of all SES officers against agreed criteria.

Devolution

To increase the effectiveness of management, the Commission is moving from a centralised financial and staffing resource management operation towards devolving these functions to divisional management.

To facilitate devolution, delegations are being reviewed and extensive training will be available to management and divisional staff. It is envisaged that the Commission's local area computer network will be extended so that all personal computers can access the Commission's automated corporate support systems.

Property

Action has been taken to relinquish the permanent hearing room in Sydney in favour of hiring venues as required.

Industrial democracy

Formal aspects of industrial democracy are pursued through the Commission's Consultative Council which comprises management and staff representatives. The council's main tasks this year were the continuation of work on Office Structures Implementation, the consideration and agreement on four occupational health and safety policies and the endorsement of the Commission's human resource development plan.

Occupational health and safety

The Commission's joint staff representative/management Occupational Health and Safety Committee prepared four policy papers for Consultative Council consideration. These four policies, now approved and disseminated to all staff, are the occupational health and safety policy, the rehabilitation policy, the AIDS policy and a policy on the use of screen-based equipment by pregnant officers.

Equal employment opportunity (EEO)

Specific EEO initiatives have included continued training in the use of personal computers for all staff, classes for staff learning English as a second language, and distribution of the *Equal Times* newsletter to all staff.

The Commission is reviewing its existing EEO program. The new program together with implementation of the Commission's human resource development plan will be an important link in achieving the Commission's objectives.

Freedom of information (FOI)

There were no formal requests under the FOI Act during 1989–90. The statement required by section 8 of the FOI Act is at annexure 2.

Human resource development (HRD)

Training and development was provided in areas agreed during discussions leading to the Commission's adoption of a HRD plan in December 1989. Four major areas in need of development were recognised:

- leadership and management;
- professional development;
- skills development; and
- support service development.

A five-day residential seminar was held for all Commissioners, SES and ASOC 8 staff as part of the leadership and management program. The seminar developed a mission statement and a corporate plan for the Commission. Training topics included communication and media skills.

In addition to development courses, staff are encouraged to undertake courses under the Studies Assistance Scheme. Twenty-three males and six females participated in this scheme. Eleven officers undertook post-graduate studies, nine undertook under-graduate studies and nine undertook other studies.

Regulations and use of statutory powers

No regulations under the Industry Commission Act were made during the year. The Commission had no cause to exercise its power to compel participants in inquiries to provide evidence.

Purchasing reform plan

A purchasing reform plan has been approved and new procedures developed to implement the reforms.

Use of consultants

In 1989–90, expenditure on consultancies totalled $170 079. A list of consultants, their projects and the cost is shown in table A18.2.

This table also includes information on $52 128 expended on consultants by the Inter-State Commission before the creation of the Industry Commission.

Financial management

The Commission's financial appropriations and expenditure for 1989–90 are set out in annexure 3 to this appendix.

Table A18.2
Consultancies in 1989–90

Consultants	*Cost $*	*Purpose*	*Period*
Australian Bureau of Statistics	20 445	Waste management survey — Recycling	31 May 90
Australian Road Research Board	50 000	Development of Australian road truck cost allocation procedure	1989–90
Cameron & Associates	2 000	IAC graduate recruitment program	15 May – 27 June 89
W Carmichael	5 200	Strengthening the GATT system — report and seminar	5 July – 21 July 89
Centre for International Economics	3 180	Assistance to standardise Commission reports and provision of a guide to authors	March 90
Communication Partners	8 374	Design layouts for Industry Commission corporate identity	23 February 90
DAS ACS	8 500	Architectural fitout reports on blocks E, F, G, M and L at Benjamin Offices, Belconnen	26 February 90
Economic Concepts Pty Ltd	20 000	Report on New Zealand's no fault accident compensation scheme — Product Liability	22 December 89 – 28 February 90
Economic Modelling Bureau of Australia	10 000	Establishment costs — evaluation of economic models	27 February 90
Facilities Management Pty Ltd	11 122	Asset management procedures	August 89
R Harrold	1 849	Data relating to the provision of education services to foreigners	30 April – 31 July 90
Partech	1 050	Graduate recruitment promotional material	March 90
Pelion Holdings	2 000	Supply of rate of return data for three Electricity Commissions — Government (Non-tax) Charges	October 89
C Pirie	1 500	Editorial assistance in production of Road Use Charges Report	27 April 1990

Consultants	Cost $	Purpose	Period
A Randall	567	Recent developments in theory and methods for valuing non-marketed goods — seminar	16 November 89
G Rattigan	5 200	Strengthening the GATT system — report and seminar	5 July – 21 July 89
SA Health Commission	11 500	Data analysis — Product Liability	8 January – 16 March 90
H A Simons	3 300	Detailed cost data for the Australian newsprint industry	20 February 90
The Change Agency	750	Career counselling seminar	7 September 89
H Van Meegan Pty Ltd	990	SES staff selection assistance	April 90
Other	2 552	Consultancies costing less than $500	
	170 079		

Inter–State Commission

Consultants	Cost $	Purpose	Period
Australian Bureau of Statistics	13 000	Compilation of motor vehicle usage tables	October 89
Centre for Transport Policy Analysis	10 000	Development of statistics on domestic freight flows	November 89
R Missingham	3 441	Assistance and advice for ISC library	June 89 – February 90
C Pirie	25 080	Editorial assistance in production of Waterfront Strategy, Volume Loading of Livestock, Registration Charges and Annual Reports	July 89 – March 90
Other	607	Consultancies costing less than $500	
	52 128		

Annexure 1

INDUSTRY
COMMISSION

Corporate plan

September 1990

Foreword

This corporate plan sets out the role of the Industry Commission and the major tasks we perform to achieve our objectives. The operations of the Commission are governed by the *Industry Commission Act 1989*, which sets out general principles and methods of operation.

The plan does not set out in detail individual strategies that we have adopted in support of our objectives. Further information on these is contained in the Commission's procedures manual, research plan, human resources plan and information strategy. This Corporate Plan covers the three-year period from 1990–91. The Commission aims to review its plan on an annual basis, or when there is a significant change to its role.

Introduction

The Industry Commission is an independent Commonwealth advisory body established under the *Industry Commission Act 1989*. The Commission is the Commonwealth Government's major review and inquiry body in industry matters and its expertise is in examining microeconomic policy issues.

Its responsibilities under the Industry Commission Act are to respond to specific issues referred to it by the Government, and to report annually on the economic performance of industry and the effects of assistance and regulation on industry and the economy.

The Commission operates on three fundamental precepts:

- it is an independent advisory body, free of executive or administrative function on industry matters
- its inquiry procedures are open and public, providing the opportunity for public involvement in policy formulation and scrutiny of requests and the advice the Commission provides
- it reviews industry matters from the perspective of the community as a whole rather than the interests of any particular industry or community group.

The Commission has a Chairperson and from four to eight other Commissioners, all of whom are appointed by the Governor-General for periods of up to 5 years. Commissioners and Associate Commissioners are assisted by staff who are Commonwealth public servants. The Commission brings together the former Industries Assistance Commission, the Inter-State Commission and the Business Regulation Review Unit.

> Our aim is to achieve improvements in the well-being of Australians by providing information to the community and independent, public advice to Australian governments on ways to improve overall economic performance.

Our success depends on convincing others of the merits of the reforms we propose and often that success is only achieved after a period in which a consensus for reform has emerged. In those circumstances it is difficult in the short term to measure how successfully we have completed our mission and an assessment of performance needs to focus on how well we have reached our intermediate objectives.

To achieve our mission we have the following intermediate objectives

- to monitor and report on the economic performance of Australian industry
- to identify economic inefficiencies and their cost to the community
- to identify how these costs could be reduced to provide the community with a higher standard of living
- to present these findings in a clear and persuasive way to the community.

To achieve these objectives, we have two main programs

- public inquiries on specific issues referred to us by the Government
- general reporting on the performance of the economy and how it can be enhanced through structural change.

In both programs we expect to prepare well-researched, compelling assessments of the case for significant microeconomic reform.

In addition, in support of our main objectives we expect to be efficient in the use of our own resources and have a management program with this as its objective.

Public inquiry program

Public inquiries are the main forum for us to identify and assess the costs of economic inefficiencies. Our inquiries improve policy making by providing information and an opportunity for public scrutiny of claims by those potentially affected by change. Inquiry reports also provide a unique opportunity to raise public understanding of the choices the community faces.

The inquiry process has three stages

- informing the public of the inquiry and encouraging their participation
- marshalling information and economic analysis on the topics under consideration
- providing advice to governments and facilitating the public understanding of that advice.

To notify the public and encourage their participation we

- advertise the inquiry
- identify and contact potential participants
- distribute an issues paper and visit interested parties
- facilitate the preparation and presentation of submissions by participants.

To marshal information and economic analysis on the issues under reference we

- identify key information needs
- organise the information gathered and relevant research results in a form which best serves the purposes of the inquiry
- hold a first round of public hearings whenever possible given our timetable
- publish a draft report and invite comments on it
- hold public hearings on the draft report.

To provide advice to Government and facilitate the public understanding of that advice we

- finalise the report by the specified date, advising on policy options along with the course of action we consider to be most appropriate
- where appropriate, identify priorities for further research and public inquiry
- facilitate public understanding of the issues raised in the report after its release by preparing material explaining to different sectors of the community the analysis underlying our findings.

General reporting and research

Through general reporting, we provide information, analysis and commentary on industry issues. The centre-piece of the general reporting function is the Annual Report. Information, Discussion and Working Papers also provide important avenues for disseminating our work.

Within the program we

- monitor performance of Australian industry and identify priority areas for reform
- provide microeconomic advice to governments or their agencies consistent with the principles contained in our public reports
- develop, maintain and make available an analytical capacity that will better inform the community about policy options.

To monitor performance of Australian industry and identify priority areas for reform we

- compile and release an Annual Report that includes an assessment of the economic performance of Australian industry, the effects of assistance and regulation on the economy using the available range of economic indicators and reports on major trade developments which affect the Australian economy

- maintain an active program of reviewing industry performance and the nature and effect of government interventions and other institutional arrangements to extend the range of available indicators
- prepare and release Information and Discussion Papers on specific industries, emerging issues or indicators of performance
- make our work more accessible to wider audiences through speeches, conferences, media contacts and the development of new forms of publication tailored to different audiences (for example, simple summary papers on current issues).

To develop, maintain and make available an analytical capacity that will better inform the community about policy options we

- undertake a program of research driven by the anticipated needs of the current and forward inquiry program, and the emerging priorities for policy reform coordinated through a review at regular intervals of our Research Plan
- develop priorities for research over a three-year horizon including:
  - environment and natural resources
  - social and regional issues
  - labour markets
  - regulations
  - Federal/State relationships
  - service sector (for example, health and education issues)
  - ways of promoting competition in the public sector and improving sector performance
  - taxation issues
- develop and maintain analytical frameworks and information systems including:
  - models of the Australian economy to investigate the economy-wide effects of policy options and other developments
  - multi-country models to investigate the international dimensions to policy options and other developments
  - a Register of Industry Performance
  - a Register of Microeconomic Reform
- provide government agencies and others with access to our information systems and analytical frameworks: such access will have regard to our resource constraints and the potential benefits to the community from having more and better information to guide policy debates as well as the user-pays principle
- Through the Office of Regulation Review the Commission also provides comments to the Government on regulatory issues. This allows the expertise of the Commission to be brought to bear in a timely manner to clarify the economic

implications of options available to government without compromising the independence and impartiality of the public inquiry process.

Management

To meet our responsibilities efficiently the Commission has a strategy of adopting management techniques that suit our aims and environment and that allow for the regular review of the allocation of resources to meet our priorities.

We consider that the people who work for the Commission are its most important assets. We seek to create a fair and reasonable environment where our staff can make the greatest possible contribution to our aims, and to their own development. To achieve this we

- maintain an active recruitment policy, especially for graduates, focusing on our current and future need for skills
- place a high priority on staff training and development, covering the development of research and economic analysis skills, management skills and corporate support skills
- encourage the flexible allocation of staff to tasks, for example, through a staff initiated rotation scheme
- develop, implement and maintain a scheme of regular performance appraisal of all staff
- implement a system of performance-based pay according to Public Service guidelines
- monitor Equal Employment Opportunity, Industrial Democracy and Occupational Health and Safety developments, inform managers of these developments and ensure that efficient mechanisms are adopted to reach objectives in these areas.

We seek to provide a physical environment and technical resources so that our staff can optimise their productivity, within our overall budget allocation.

To ensure efficient use and allocation of resources within the Commission, we use a budgeting system that devolves resources and responsibility for their use to managers while monitoring performance against our objectives. This includes

- monitoring progress of inquiries to ensure that Commissioners judge they are of an acceptable quality and meet agreed timetables
- monitoring progress of research according to timetables and objectives set out in our Research Plan and in planning for our Annual Report
- meeting staff training and development needs as set out in our Human Resources Plan
- managing resources within devolved budgets.

We are monitoring how well the scheme of devolution operates and will modify it where that will improve efficiency.

Annexure 2

Freedom of information statement

The following information is provided as required under section 8 of the *Freedom of Information Act 1982*.

The Commission

The Industry Commission was created under the *Industry Commission Act 1989*, with effect from 9 March 1990.

It consists of a Chairman and full-time Commissioners appointed by the Governor-General, and Associate Commissioners appointed by the Minister, in accordance with the Industry Commission Act. Appointment is for a term not exceeding five years, or until the inquiry and report on a particular matter is completed.

Staff assisting the Commission are employed under the *Public Service Act 1922*.

The Commission maintains its office in Canberra and public hearing rooms in Canberra and Melbourne.

The Commission is required under the Industry Commission Act to conduct public inquiries on the industry matters referred to it by the Government. The Commission may inspect and copy relevant documents and summons persons to give evidence in the course of its inquiries, and such witnesses are protected under the Act from being subject to prejudicial treatment as a result of their giving evidence.

Categories of documents

The Commission releases draft reports for most inquiries, giving interested parties the opportunity to examine and comment on them.

Documents for circulation within the Commission are

- monthly inquiry program (activities and information); and
- office circulars relating to staff matters.

The Commission holds working documents relating to:

- administrative information on financial allocations and expenditure, staffing, internal audit, official travel, office accommodation, assets and stores;
- ministerial and general correspondence;
- records of meetings, discussions, interviews; and
- inquiry correspondence and public hearing material.

Documents and publications customarily made available to the public free of charge, upon request, consist of current information circulars, issues papers and inquiry guidelines.

These are issued to interested parties and inquiry participants.

Access to the Commission's Register of Personal Information (as required by the *Privacy Act 1988*) can be requested from the FOI contact officer.

Documents available for purchase at Commonwealth Government Bookshops are:

- the Commission's annual report to Parliament;
- reports on matters referred to the Industry Commission by the Minister; and
- reports on matters researched by the Commission.

Statements of evidence (non-confidential) received by the Commission and transcripts of public hearings can be purchased through the Commission's contract with Rank Xerox, Canberra.

Transcripts and statements of public evidence are available for perusal in the Commission's library.

Facilities for access

The Commission's documents may be inspected in the Commission's offices in Canberra between 9.00 am and 4.30 pm, Monday to Friday (excepting public holidays).

Information and written requests for access to Commission documents under the *Freedom of Information Act 1982* can be made through:

The Director
Finance and Services Section
Industry Commission
Level 3
Aqua Building
Chan Street
Belconnen ACT 2616
Telephone: 06 2643357

Decisions regarding requests for access to documents under section 23 of the Freedom of Information Act will be made at Division and Branch Head level. An applicant who is not satisfied with a decision relating to the provision of access, or relating to the liability to pay a charge, may seek a review of the decision by applying to the Chairman of the Commission within 28 days of receiving notice of the decision.

Annexure 3

Industry Commission

Financial Statements

1989–90

Contents

AUSTRALIAN NATIONAL AUDIT OFFICE

Medibank House
Bowes Street
Woden ACT 2606

Our ref: F89/191

INDUSTRY COMMISSION
AUDIT REPORT ON FINANCIAL STATEMENT

In accordance with subsection 50(1) of the Audit Act 1901, the Chairman of the Industry Commission has submitted for audit the financial statement of the Industry Commission for the year ended 30 June 1990.

Subsection 50(2) of the Act provides that the financial statement shall be prepared in accordance with financial statements guidelines issued by the Minister for Finance and shall set out:

(a) particulars of the receipts and expenditures of the Consolidated Revenue Fund, the Loan Fund and the Trust Fund during the financial year in respect of the Commission, and

(b) such other information (if any) relating to the financial year as is required by the financial statements guidelines to be included in the statement.

The parts of the financial statement prepared in accordance with paragraph 50(2)(b) of the Act are not subject to audit examination and report unless the Minister for Finance has declared that they are to be subject to full examination. At the date of this report the Minister had not made a declaration in respect of the Industry Commission.

The parts of the financial statement prepared in accordance with paragraph 50(2)(a) of the Act which are subject to audit have been prepared in accordance with the policies outlined in Note 1(a),(b),(c),(g)(iii) and have been audited in conformance with the Australian National Audit Office Auditing Standards which incorporate the Australian Auditing Standards.

In accordance with paragraphs 51(1)(a) and (b) and section 70F of the Act, I now report that the parts of the statement prepared in accordance with paragraph 50(2)(a) are, in my opinion:

- in agreement with the accounts and records kept in accordance with section 40 of the Act, and
- in accordance with the financial statements guidelines made by the Minister for Finance.

D. S. Lennie

D. S. Lennie
Executive Director
Australian National Audit Office

7 September 1990

GPO Box 707 Canberra Australian Capital Territory 2601 Telephone (06) 283 4777 Facsimile (06) 285 1223

Statement by the Departmental Secretary

and

Principal Accounting Officer

Certification

We certify that the attached financial statements for the year ended 30 June 1990 are in agreement with the Commission's accounts and records and, in our opinion, the statements have been prepared in accordance with the Financial Statements Guidelines for Departmental Secretaries issued in May 1990.

Signed

Dated 30·8·90

Chairman

Signed

Dated 30/8·90

Head of Office

Industry Commission

Aggregate statement of transactions by fund for the year ended 30 June 1990

Summary Statement

This Statement summarises the aggregate statements of transactions by fund for the former Industries Assistance Commission and the former Inter-State Commission from 1 July 1989 to 8 March 1990, and for the Industry Commission from 9 March 1990 to 30 June 1990. (For details on the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		1989–90 Budget $	1989–90 Actual $
	Consolidated Revenue Fund (CRF)		
26 614	Receipts	71 900	324 558
–	Expenditure from Special Appropriations	–	–
12 839 364	Expenditure from Annual Appropriations	14 191 000	14 419 119
12 839 364	Expenditure	14 191 000	14 419 119

Industry Commission

Aggregate statement of transactions by fund for the year ended 30 June 1990

This statement shows aggregate cash transactions, for which the Commission is responsible, for the Commonwealth Public Account (CPA). The Commission does not operate a Loan Fund or a Trust Fund. (For details on the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		1989–90 Budget $	1989–90 Actual $
	Consolidated Revenue Fund (CRF)		
–	Receipts	–	268 288
–	Expenditure from Special Appropriations	–	–
–	Expenditure from Annual Appropriations	–	5 049 705
–	Expenditure	–	5 049 705

Industry Commission

Detailed statement of transactions by fund for the year ended 30 June 1990

CONSOLIDATED REVENUE FUND (CRF)

Receipts to CRF

The CRF is the main working fund of the Commonwealth and consists of all current moneys received by the Commonwealth (excluding loan raisings and moneys received by the Trust Fund). The Commission is responsible for the following receipt items. (For details on the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		Program*	1989–90 Budget $	1989–90 Actual $
–	Miscellaneous	7(a)	–	22 343
–	Section 35 of Audit Act 1901	7(b)	–	245 945
–	*Total Receipts CRF*		–	268 288

(a) Receipts offset within outlays
(b) To be credited to Running Costs–Division 676 (See note 2)

Expenditure from CRF

The Constitution requires that an appropriation of moneys by the Parliament is required before any expenditure can be made from the CRF. Appropriations follow two forms:

- special (or standing) appropriations; and
- annual appropriations.

The Commission is responsible for the following expenditure items. (For details on the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		1989–90 Appropriation $	1989–90 Actual $
	Annual Appropriations		
–	{Appropriation Act No 1	5 025 526}	5 049 705
	{Appropriation Act No 3	171 000}	
–	Appropriation Act No 2	–	–
–	**Total Expenditure from Annual Appropriations**	5 196 526	5 049 705
–	Total *Expenditure From CRF*		5 049 705

* Refer to Program Statement (this information has not been subject to audit).

Details of Expenditure From Annual Appropriations

1988–89 Actual $		Program*	1989–90 Appropriation $	1989–90 Actual $
	Appropriation Acts Nos 1 and 3			
	Division 676 Industry Commission			
–	1. Running Costs (Annotated Appropriation–see note 2)	7	4 261 416	4 158 855
–	2. Property Operating Expenses	7	862 110	817 849
	3. Other Services			
–	01. Contribution to the University of Melbourne for the further development of the IMPACT project.	7	73 000	73 000
–			5 196 526	5 049 705

* Refer to Program Statement (This information has not been subject to audit).

Industry Commission

Program summary
for the year ended 30 June 1990

This Statement shows the outlays for each program administered by the Commission and reconciles the Commission's total outlays to total expenditure from appropriations. 'Expenditure' refers to the actual amount of resources consumed by a program whereas 'outlays' refers to the 'net' amount of resources consumed, after offsetting associated receipt and other items.

The Statement also reconciles the total receipts classified as revenue (ie receipts not offset within outlays or classified as financing transactions) for each program, with 'Receipts to CRF'. (For details on the establishment of the Industry Commission see note 11(a).)

This Statement has not been subject to audit.

1988–89 Actual $'000		1989–90 Budget $'000	1980–90 Actual $'000
	Expenditure		
	Outlays		
–	7. Industry Commission	–	4 754
	Plus Receipts Offset Within Outlays		
–	7. Industry Commission	–	24
	Plus Expenditure from Section 35 Receipts transferred to Running Costs (See note 2)		
–	7. Industry Commission	–	272
–	***Total Expenditure From Appropriations***	–	5 050
	Receipts		
–	Receipts Offset Within Outlays	–	24
	Plus Section 35 Receipts to be transferred to Running Costs (See note 2)	–	244
–	***Total Receipts to CRF***	–	268

Industry Commission

Program statement for the year ended 30 June 1990

From 1989–90 approval was given for the Industries Assistance Commission to adopt a single program reporting structure within the Treasury Portfolio Program Statements (ie the Commission no longer reported at the sub-program level). A similar structure has been adopted for the Industry Commission. (For details on the establishment of the Industry Commission see note 11(a).)

This Statement therefore shows details of expenditure from annual and special appropriations at the program level. Each 'annual' appropriation item is identified by its description followed by its appropriation code in brackets. 'Special' appropriations are identified by reference to the legislation containing the special appropriation. Where 'expenditure from appropriations' and 'outlays' differ, the Statement discloses information reconciling the amounts concerned. The Statement also shows details of revenue (where applicable).

A detailed explanation of the Commission's program is provided elsewhere in this Appendix.

This Statement has not been subject to audit.

1988–89 Actual $'000		1989–90 Budget $'000	1989–90 Actual $'000
	7. Industry Commission		
	Running Costs (676.1)		
–	Salaries and Payments in the nature of Salary	–	2 618
–	Administrative Expenses	–	1 541
–	Property Operating Expenses (676.2)	–	818
–	Contribution to the University of Melbourne for the further development of the IMPACT project (676.3.01)	–	73
–	**Expenditure from Appropriations**	–	5 050
	Less Receipts Offset Within Outlays		
–	Miscellaneous	–	22
–	Balance of Section 35 Receipts not transferred to Running Costs	–	2
–		–	24
–	Less Section 35 Receipts transferred to Running Costs	–	272
–	**Outlays**	–	4 754

Industries Assistance Commission

Aggregate statement of transactions by fund for the year ended 30 June 1990

This statement shows aggregate cash transactions, for which the Commission is responsible, for the Commonwealth Public Account (CPA). The Commission does not operate a Loan Fund or a Trust Fund. (For details of the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		1989–90 Budget $	1989–90 Actual $
	Consolidated Revenue Fund (CRF)		
26 614	Receipts	71 900	55 598
–	Expenditure from Special Appropriations	–	–
11 196 509	Expenditure from Annual Appropriations	12 488 000	8 302 600
11 196 509	Expenditure	12 488 000	8 302 600

Industries Assistance Commission

Detailed statement of transactions by fund for the year ended 30 June 1990

CONSOLIDATED REVENUE FUND (CRF)

Receipts to CRF

The CRF is the main working fund of the Commonwealth and consists of all current moneys received by the Commonwealth (excluding loan raisings and moneys received by the Trust Fund). The Commission is responsible for the following receipt items. (For details on the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		Program*	1989–90 Budget $	1989–90 Actual $
26 614	Miscellaneous	7(a)	29 900	27 644
–	Section 35 of Audit Act 1901	7(b)	42 000	27 954
26 614	*Total Receipts CRF*		71 900	55 598

(a) Receipts offset within outlays
(b) To be credited to Running Costs - Division 673 (See note 2)

Expenditure from CRF

The Constitution requires that an appropriation of moneys by the Parliament is required before any expenditure can be made from the CRF. Appropriations follow two forms:

- special (or standing) appropriations; and
- annual appropriations.

The Commission is responsible for the following expenditure items. (For details on the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		1989–90 Appropriation $	1989–90 Actual $
	Annual Appropriations		
10 946 566	{Appropriation Act No 1	12 446 000}	8 302 600
	{Appropriation Act No 3	– }	
249 943	Appropriation Act No 2	–	–
11 196 509	**Total Expenditure from Annual Appropriations**	12 446 000	8 302 600
11 196 509	*Total Expenditure From CRF*		8 302 600

* Refer to Program Statement (This information has not been subject to audit).

Details of Expenditure From Annual Appropriations

1988-89 Actual $		Program*	1989-90 Appropriation $	1989-90 Actual $
	Appropriation Acts Nos 1 and 3			
	Division 673 Industries Assistance Commission			
10 766 586	1. Running Costs (Annotated Appropriation—see note 2)	7	10 434 000	7 103 331
–	2. Property Operating Expenses	7	1 874 000	1 134 269
	3. Other Services			
130 000	01. Contribution to the University of Melbourne for the further development of the IMPACT project.	7	138 000	65 000
49 980	02. Compensation and legal expenses	7	–	–
10 946 566			12 446 000	8 302 600
	Appropriation Act No 2			
	Division 976 – Capital Works and Services			
	1. Plant and Equipment			
249 943	04. Industries Assistance Commission	7	–	–
249 943			–	–

* Refer to Program Statement (This information has not been subject to audit).

Industries Assistance Commission

Program summary
for the year ended 30 June 1990

This Statement shows the outlays for each program administered by the Commission and reconciles the Commission's total outlays to total expenditure from appropriations. 'Expenditure' refers to the actual amount of resources consumed by a program whereas 'outlays' refers to the 'net' amount of resources consumed, after offsetting associated receipt and other items.

The Statement also reconciles the total receipts classified as revenue (ie receipts not offset within outlays or classified as financing transactions) for each program, with 'Receipts to CRF'. (For details on the establishment of the Industry Commission see note 11(a).)

This Statement has not been subject to audit.

1988–89 Actual $'000		1989–90 Budget $'000	1989–90 Actual $'000
	Expenditure		
	Outlays		
11 170	7. Industries Assistance Commission	12 416	8 275
	Plus Receipts Offset Within Outlays		
27	7. Industries Assistance Commission	30	28
	Plus Expenditure from Section 35 Receipts transferred to Running Costs (See note2)		
–	7. Industries Assistance Commission	42	–
11 197	***Total Expenditure From Appropriations***	12 488	8 303
	Receipts		
27	Receipts Offset Within Outlays	30	28
–	**Plus** Section 35 Receipts to be transferred to Running Costs (See note 2)	42	28
27	***Total Receipts to CRF***	72	56

Industries Assistance Commission

Program statement
for the year ended 30 June 1990

From 1989–90 approval was given for the Industries Assistance Commission to adopt a single program reporting structure within the Treasury Portfolio Program Statements (ie the Commission no longer reported at the sub-program level). A similar structure has been adopted for the Industry Commission. (For details on the establishment of the Industry Commission see note 11(a).)

This Statement therefore shows details of expenditure from annual and special appropriations at the program level. Each 'annual' appropriation item is identified by its description followed by its appropriation code in brackets. 'Special' appropriations are identified by reference to the legislation containing the special appropriation. Where 'expenditure from appropriations' and 'outlays' differ, the Statement discloses information reconciling the amounts concerned. The Statement also shows details of revenue (where applicable).

This Statement has not been subject to audit.

1988–89 Actual $'000		1989–90 Budget $'000	1989–90 Actual $'000
	7. Industries Assistance Commission		
	Running Costs (673.1)		
	Salaries and Payments in the		
8 339	nature of Salary	7 687	5 164
2 428	Administrative Expenses	2 789	1 940
–	Property Operating Expenses (673.2)	1 874	1 134
	Contribution to the University of Melbourne for the further development		
130	of the IMPACT project (673.3.01)	138	65
50	Compensation and Legal Expenses (673.3.02)	–	–
	Plant and Equipment -		
	Plant and Equipment - Industries		
250	Assistance Commission (976.1.04)	–	–
11 197	**Expenditure from Appropriations**	12 488	8 303
	Less Receipts Offset Within Outlays		
27	Miscellaneous	30	28
	Balance of Section 35 Receipts not		
–	transferred to Running Costs	–	–
27		30	28
	Less Section 35 Receipts transferred		
–	to Running Costs	42	–
11 170	**Outlays**	12 416	8 275

Inter–State Commission

Aggregate statement of transactions by fund for the year ended 30 June 1990

This statement shows aggregate cash transactions, for which the Commission is responsible, for the Commonwealth Public Account (CPA). The Commission does not operate a Loan Fund or a Trust Fund. (For details of the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		1989–90 Budget $	1989–90 Actual $
	Consolidated Revenue Fund (CRF)		
–	Receipts	–	672
–	Expenditure from Special Appropriations	–	–
1 642 855	Expenditure from Annual Appropriations	1 703 000	1 066 814
1 642 855	Expenditure	1 703 000	1 066 814

Inter–State Commission

Detailed statement of transactions by fund for the year ended 30 June 1990

CONSOLIDATED REVENUE FUND (CRF)

Receipts to CRF

The CRF is the main working fund of the Commonwealth and consists of all current moneys received by the Commonwealth (excluding loan raisings and moneys received by the Trust Fund). The Commission is responsible for the following receipt items. (For details on the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		Program*	1989–90 Budget $	1989–90 Actual $
–	Miscellaneous	7.2(a)	–	672
–	Section 35 of Audit Act 1901	7.2(b)	–	–
–	*Total Receipts CRF*		–	672

(a) Receipts offset within outlays
(b) To be credited to Running Costs - Division 664 (See note 2)

Expenditure from CRF

The Constitution requires that an appropriation of moneys by the Parliament is required before any expenditure can be made from the CRF. Appropriations follow two forms:

- special (or standing) appropriations; and
- annual appropriations.

The Commission is responsible for the following expenditure items. (For details on the establishment of the Industry Commission see note 11(a).)

1988–89 Actual $		1989–90 Appropriation $	1989–90 Actual $
	Annual Appropriations		
1 593 360	{Appropriation Act No 1	1 703 000}	1 066 814
	{Appropriation Act No 3	– }	
49 495	Appropriation Act No 2	–	–
1 642 855	**Total Expenditure from Annual Appropriations**	1 703 000	1 066 814
1 642 855	*Total Expenditure From CRF*		1 066 814

* Refer to Program Statement (This information has not been subject to audit).

Details of Expenditure From Annual Appropriations

1988–89 Actual $		Sub–Program*	1989–90 Appropriation $	1989–90 Actual $
	Appropriation Acts Nos 1 and 3			
	Division 664 Inter–State Commission			
1 593 360	1. Running Costs (Annotated Appropriation—See note 2)	7.1, 7.2	1 412 000	898 193
–	2. Property Operating Expenses	7.2	291 000	168 620
1 593 360			1 703 000	1 066 814
	Appropriation Act No 2			
	Division 972 Capital Works and Services			
	1. Plant and equipment			
49 495	02. Inter–State Commission	7.2	–	–
49 495			–	–

* Refer to Program Statement (this information has not been subject to audit).

Inter–State Commission

Program summary
for the year ended 30 June 1990

This Statement shows the outlays for each program administered by the Commission and reconciles the Commission's total outlays to total expenditure from appropriations. 'Expenditure' refers to the actual amount of resources consumed by a program whereas 'outlays' refers to the 'net' amount of resources consumed, after offsetting associated receipt and other items.

The Statement also reconciles the total receipts classified as revenue (ie receipts not offset within outlays or classified as financing transactions) for each program, with 'Receipts to CRF'. (For details on the establishment of the Industry Commission see note 11(a).)

This Statement has not been subject to audit.

1988-89 Actual $'000		1989-90 Budget $'000	1989-90 Actual $'000
	Expenditure		
	Outlays		
1 643	7. Inter–State Commission	1 703	1 066
	Plus Receipts Offset Within Outlays		
–	7. Inter–State Commission	–	1
	Plus Expenditure from Section 35 Receipts transferred to Running Costs (see note 2)		
–	7. Inter–State Commission	–	–
1 643	***Total Expenditure From Appropriations***	1 703	1 067
	Receipts		
–	Receipts Offset Within Outlays	–	1
–	**Plus** Section 35 Receipts to be transferred to Running Costs (see note 2)	–	–
–	***Total Receipts to CRF***	–	1

Inter–State Commission

Program statement
for the year ended 30 June 1990

This Statement shows details of expenditure from annual and special appropriations for each sub-program administered by the Commission. Each 'annual' appropriation item contributing to a sub-program is identified by its description followed by its appropriation code in brackets. 'Special' appropriations are identified by reference to the legislation containing the special appropriation. Partial allocations of appropriation items to sub-programs are indicated by ('p') following the item. With respect to those sub-programs for which 'expenditure from appropriations' and 'outlays' differ, the Statement discloses information reconciling the amounts concerned. The Statement also shows details of revenue for each sub-program (where applicable).

For details on the establishment of the Industry Commission see note 11(a).

This Statement has not been subject to audit.

1988-89 Actual $'000		1989-90 Budget $'000	1989-90 Actual $'000
	7. Inter–State Commission		
	7.1 Inter–State Commission (Commonwealth Constitution S.103)		
	Running Costs (664.1)(p)		
	Salaries and Payments in the		
265	nature of Salary	266	197
136	Administrative Expenses	160	90
401	**Expenditure from Appropriations**	426	287
401	**Outlays**	426	287

1988–89 Actual $'000		1989–90 Budget $'000	1989–90 Actual $'000
	7.2 Staff necessary to assist the Commission (S.27 of the Inter–State Commission ACT 1975)		
	Running Costs (664.1)(p)		
	Salaries and Payments in the		
585	nature of Salary	602	403
607	Administrative Expenses	384	208
–	Property Operating Expenses (664.2)	291	169
	Plant and Equipment -		
	Plant and Equipment - Inter–State		
50	Commission (972.1.02)	–	–
1 242	**Expenditure from Appropriations**	1 277	780
	Less Receipts Offset Within Outlays		
–	Miscellaneous	–	1
	Balance of Section 35 Receipts		
–	not transferred to Running Costs	–	–
			1
	Less Section 35 Receipts transferred		
–	to running Costs	–	–
1 242	**Outlays**	1 277	779
	Total Program		
1 643	**Expenditure from Appropriations**	1 703	1 067
1 643	**Outlays**	1 703	1 066

Industry Commission

Statement of supplementary financial information as at 30 June 1990

This Statement has not been subject to audit.

1988–89 $'000		Notes	1989–90 $'000
	Current assets		
5.2	Cash balance		6
0.3	Receivables	3	22
	Non-current assets		
	Plant & Equipment		971
	Computer & Office Equipment		1 449
	Other		458
	Current liabilities		
49.9	Creditors	4	181

Industry Commission

Notes to the financial statements for the year ended 30 June 1990

Note 1

Statement of Significant Accounting Policies

(a) The financial statements have been prepared in accordance with the 'Financial Statements Guidelines for Departmental Secretaries' issued by the Minister for Finance.

(b) The financial statements have been prepared:

- on a cash basis, with the exception of the Statement of Supplementary Financial Information which includes certain accrual-type information; and
- in accordance with the historical cost convention. They do not take account of changing money values or, except where stated, current values of non–current assets.

(c) Amounts shown in the Aggregate Statement of Transactions by Fund and the Detailed Statement of Transactions by Fund (and related notes) have been rounded to the next lower, or next higher, dollar. Amounts in the other Statements have been rounded to the nearest thousand dollars in accordance with the following principles:

- amounts have been rounded up if the three end–digits are greater than 500, or down if less than 500;
- if the three end–digits equal 500, the amount has been rounded to an even figure, for example -
  - $17 484 500 = $17 484 (even, therefore stays even)
  - $17 483 500 = $17 484 (odd, therefore has been rounded up to even);
- all totals are the rounded additions of ***unrounded*** figures.

(d) (i) Land and buildings, computer software and intangible assets such as patents and copyrights have not been accounted for in the Statement of Supplementary Information. Nor have minor assets – other than receivables, advances and investments – having a unit value less than $1 000.

(ii) Inventories brought to account in the Statement of Supplementary Information include only items whose unit value exceeds $1 000 and comprise goods or other property:

- held for sale,
- to be used in the production of goods, other property or services for sale, or
- held by way of consumable stores.

(e) Administrative expenses shown in the Program Statement include minor capital expenditure items as they are considered part of ordinary annual services for the purposes of the Appropriation Acts. 'Minor capital expenditure' includes items of capital expenditure costing less than $250 000.

(f) Salaries, wages and related benefits payable to officers and employees of the Commission have not been accounted for in the balance of creditors in the Statement of Supplementary Financial Information.

(g) (i) Amounts payable to and by the Commission in foreign currencies have been translated to Australian currency at rates of exchange prevailing at 30 June 1990.

(ii) Monetary assets and liabilities held overseas and which have been disclosed in the statements have been translated to Australian currency at rates of exchange prevailing at 30 June 1990.

(iii) Foreign currency transactions occurring during the year have been converted at the rate of exchange prevailing at the date of each transaction.

Note 2

Running Costs (Annotated Appropriation 676.1.00)

This appropriation was annotated pursuant to Section 35 of the Audit Act 1901 to allow the crediting of certain receipts.

The arrangement allowed for the crediting to Running Costs of receipts which were generated by the sale of surplus or underperforming personal property assets and user chargings in relation to the use of economic models and other cost recoveries, and consultancy fees for work undertaken on behalf of the Department of Foreign Affairs and Trade.

The annotated appropriation operated as follows:

Annotated Appropriation (1)	*Receipts* (2)	*Appropriation* (1)+(2)	*Expenditure*
$12 017 000	$271 850[(a)]	$12 288 850	$12 160 380

(a) The Department of Finance only issued Funds Allocation Authority for $271 195.

Note 3 (This note is not subject to audit)

Receivables

1988–89 $'000		1989–90 $'000

Of the total amount of $21 579 outstanding as at 30 June 1990 the following amounts were overdue for:

0.300	Less than 30 days	0.612
–	30–60 days	1.387
–	More than 60 days	19.566
0.300		21.565

All the receivables are expected to be fully recovered.

Note 4 (This note is not subject to audit)

Trade Creditors

As at 30 June 1990 an amount of $180 598 was owed to trade creditors.

There were no amounts overdue for payment.

Note 5 (This note is not subject to audit)

Forward Obligations

The Commission has entered into the following forward obligations as at 30 June 1990 which are payable as follows:

Item	*Not later than one year*	*1 - 2 years*	*Later than 2 years*	*Total*
IMPACT project	$130 000	–	–	$130 000

Note 6 (This note is not subject to audit)

Act of Grace Payments

No payments were made during the financial year 1989–90 pursuant to authorisations given under Section 34A of the Audit Act 1901.

Note 7 (This note is not subject to audit)

Waiver of Rights to Payment of Moneys

No payments were waived during the financial year 1989–90 under sub-section 70C(2) of the Audit Act 1901.

Note 8 (This note is not subject to audit)

Amounts Written Off

The following details are furnished in relation to amounts written off during the financial year 1989–90 under sub-section 70C(1) of the Audit Act 1901.

		UP TO $1000		***OVER $1000***	
		Number	***Amount***	***Number***	***Amount***
			$		**$**
(i)	Losses or deficiencies of public moneys	–	–	–	–
(ii)	Irrecoverable amounts of revenue	–	–	–	–
(iii)	Irrecoverable debts and overpayments	–	–	–	–
(iv)	Amounts of revenue, or debts or overpayments, the recovery of which would, in the opinion of the Minister, be uneconomical	–	–	–	–
(v)	Lost, deficient, condemned, unserviceable or obsolete stores	6	885	–	–

Note 9 (This note is not subject to audit)

Losses and Deficiencies etc in Public Moneys and Other Property

No action was taken during the financial year 1989–90 under Part X11 of the Audit Act 1901.

Note 10 (This note is not subject to audit)

Resources Received Free Of Charge

During the 1989–90 financial year the Australian National Audit Office (ANAO) provided auditing services, as required by the Audit Act 1901, to the Commission without charge. The estimated cost of those services is $20 000. The expenditure incurred in providing those services was met from the ANAO's appropriations.

In addition, a number of other Commonwealth departments and agencies provided services to the Commission without charge for which it is not practicable to estimate a cost. Expenditures for those services were met from appropriations to the department or agency concerned. The major services received include the following:

Department of Finance

- Accounting and budgetary services in the form of the computerised Finance ledger and payroll services.

Attorney–General's Department

- The provision of legal services not able to be provided within the Commission.

Australian Archives

- The provision of on–going archival services.

Note 11

Establishment of the Industry Commission

(a) The Industry Commission was established by the Industry Commission Act which was proclaimed on 9 March 1990. The new Commission incorporates functions undertaken by the former Industries Assistance (IAC) and Inter–State (ISC) Commissions, and the former Business Regulation Review Unit (BRRU) of the Department of Industry, Technology and Commerce (DITAC).

The Industry Commission Act also established funding for the new Commission in 1989–90 in so far as it provided that unspent balances of funds appropriated under an Appropriation Act for the purposes of the IAC or the ISC were to be treated as having been appropriated for the purposes of the Industry Commission. These balances, along with the balance of funds appropriated for the BRRU under DITAC Running Costs appropriation (Item 380.1) and re-appropriated to the Industry Commission in Appropriation Act (No. 3) 1989–90, combined to form the 1989–90 appropriation for the Industry Commission.

A table detailing the above funding arrangements, together with other variations covered by Appropriation Act (No. 3) 1989–90 and funds apropriated under Section 35 of the Audit Act 1901, is set out below.

	Running Costs $	Property Operating Expenses $	Other Services $	Total $	
Appropriation Act (No 1) 1989–90					
IAC	10 434 000	1 874 000	138 000	12 446 000	
ISC	1 412 000	291 000	–	1 703 000	
	11 846 000	2 165 000	138 000	14 149 000	
Less Expenditure to 8 March 1990					
IAC	7 103 332	1 134 269	65 000	8 302 601	
ISC	924 102	(i) 168 621	–	1 092 723	(i)
	8 027 434	1 302 890	65 000	9 395 324	
Balance transferred to the **Industry Commission**					
IAC	3 330 668	739 731	73 000	4 143 399	
ISC	487 898	(ii) 122 379	–	610 277	(ii)
	3 818 566	862 110	73 000	4 753 676	
Add Balance of **BRRU** funds transferred to the **Industry Commission** in Appropriation Act (No. 3) 1989-90	229 500	–	–	229 500	
Sub total	4 048 066	862 110	73 000	4 983 176	
Add Other Variations included in Appropriation Act (No. 3) 1989–90	(58 500)	–	–	(58 500)	
Add Funds appropriated under Section 35 of the Audit Act 1901	271 850	(iii) –	–	271 850	(iii)
Total Appropriation – Industry Commission	4 261 416	862 110	73 000	5 196 526	

(i) Includes salaries expenditure totalling $25 908 which was subsequently transferred to the Industry Commission after 9 March 1990. The resulting appropriation balance was not made available to the Commission.

(ii) Includes Funds Allocation Authority for $99 000 which was subsequently withdrawn by the Department of Finance in respect of salaries and allowances payable to Inter–State Commissioners which the Department of Transport and Communications continued to meet after 9 March 1990 from a special appropriation under Section 19 of the ISC Act.

(iii) The Department of Finance only issued Funds Allocation Authority for $271 195.

(b) Office Requisites outlays by the Inter–State Commission as at 8 March 1990 included the following prepayments:

- $45 091 for the publication of Commission reports in accordance with the Australian Government Publishing Service printmax operations, which became effective on 1 October 1988.
- $9 763 held at the Reserve Bank of Australia to facilitate the settlement of the Commission's Australian Government Credit Card account with the Westpac Banking Corporation.

Both the above balances were transferred to the Industry Commission.

References

ABARE (Australian Bureau of Agricultural and Resource Economics) 1988, *Primary Industry Assistance in an Economy-wide Context*, Discussion Paper 88.1, AGPS, Canberra.

ABS (Australian Bureau of Statistics) 1987, *1984 Household Expenditure Survey, Australia: the effects of government benefits and taxes on household income*, Cat. no. 6537.0.

— 1990a, *1988–89 Household Expenditure Survey, Australia: summary of results*, Cat. no. 6530.0

— 1990b, *Australian National Accounts: National Income and Expenditure*, June Quarter 1990, Cat. no. 5206.0.

— 1990c, *Australian Demographic Statistics*, March Quarter 1990, Cat. no. 3101.0.

— 1990d, *1988–89 Household Expenditure Survey, Australia*, Information Paper, Cat. no. 6527.0.

Abramovtiz, M 1990, 'The Catch-up Factor in Postwar Economic Growth', *Economic Inquiry*, 28(1), pp. 1–18.

ACS (Australian Customs Service) 1989, *Annual Report 1988–89*, AGPS, Canberra.

— 1990, *Annual Report 1989–90*, AGPS, Canberra.

ADA (Anti-Dumping Authority) 1988, *Cement Clinker from the Republic of Korea*, Report No. 1, AGPS, Canberra.

— 1989a, *Coloured Pencils from Brazil, Hungary and Poland*, Report No. 2, AGPS, Canberra.

— 1989b, *Inquiry into Material Injury, Profit in Normal Values and Extended Period of Time*, Report No. 4, AGPS, Canberra.

— 1989c, *Self-Propelled Multi-Tyred Rollers from Czechoslovakia*, Report No. 5, AGPS, Canberra.

— 1989d, *Evaporated Milk from Canada*, Report No. 6, AGPS, Canberra.

— 1989e, *Blacklead Pencils from Brazil*, Report No. 8, AGPS, Canberra.

— 1989f, *Certain Outboard Motors from Belgium, the United States of America and Japan*, Report No. 10, AGPS, Canberra.

— 1990, *Annual Report 1988–89*, AGPS, Canberra.

AIDAB (Australian International Development Assistance Bureau) 1990, *Australia's Overseas Aid Program: Helping Australian Industry Too*, International Development Issues No. 10, AGPS, Canberra.

AIRDIB (Australian Industrial Research and Development Incentives Board) 1986, *Annual Report 1985–86*, AGPS, Canberra.

AMC (Australian Manufacturing Council) 1990, *The Global Challenge: Australian Manufacturing in the 1990s*, Final Report of the Pappas Carter Evans and Koop / Telesis Study, Melbourne, July.

ARC (Administrative Review Council) 1990, *Rule Making by Commonwealth Agencies: Issues Paper*, Commonwealth of Australia, 30 June.

Aspden, C 1990, *Estimates of Multifactor Productivity, Australia*, Australian Bureau of Statistics Occasional Paper, Cat. no. 5229.0.

Austel (Australian Telecommunications Authority) 1990a, *Private Networks: Common Interest*, Report to the Minister for Telecommunications and Aviation Support, Melbourne, February.

— 1990b, *Industry Development Arrangements Customer Equipment*, 3rd Quarter Report, May.

— 1990c, *Public Mobile Telephone Services*, Report to the Minister for Transport and Communications, Melbourne, May.

— 1990d, *Public Access Cordless Telephone Services*, Report to the Minister for Transport and Communications, Melbourne, May.

BCA (Business Council of Australia) 1990, 'Australia's Recent Productivity Performance', *Business Council Bulletin*, No. 63, April, pp. 4–9.

Beazley, K C (Minister for Transport and Communications) 1990, *Media Release*, 1 May.

Beddall, D P (Chairman, House of Representatives Standing Committee on Industry, Science and Technology) 1990a, *Small Business in Australia: Challenges, Problems and Opportunities*, Parliament of the Commonwealth of Australia, January.

— (Minister for Small Business and Customs) 1990b, Second Reading Speech on the Bounty (Textile Yarns) Amendment Bill, House of Representatives, *Weekly Hansard*, No. 1, 8–10 May 1990, pp. 64–7.

— 1990c, *News Release*, C90/497, 15 August.

— 1990d, Second Reading Speech on the Customs Tariff Amendment Bill, House of Representatives, *Daily Hansard*, 12 September, pp. 1698–9.

BIE (Bureau of Industry Economics) 1989, *The 150% Tax Concession for Research and Development Expenditure — Interim Report*, Program Evaluation Report 7, AGPS, Canberra.

— 1990a, *The Computer Bounty Scheme*, Program Evaluation Report 8, AGPS Canberra.

— 1990b, *Evaluation of the Metal Working Machines and Robot Bounty Scheme*, Program Evaluation Report 9, AGPS, Canberra.

Bolkus, N (Federal Minister for Consumer Affairs) 1990, *News Release*, 12 February.

Booz–Allen & Hamilton (Australia) Limited and Travers Morgan Pty Ltd 1990, *National Freight Initiative*, Final Report, 30 March.

Bowen, L F (Attorney-General) 1988, Second Reading Speech on the Corporations Bill, House of Representatives 1988, *Debates*, HR 161, pp. 2993–5.

Brown, R J (Minister for Land Transport and Shipping Support) 1989a, Second Reading Speech on the Industry, Technology and Commerce Legislation Amendment Bill (No. 2), House of Representatives, *Weekly Hansard*, No. 13, 3–5 October 1989, pp. 1407–8.

— 1989b, Second Reading Speech on the Bounty (Photographic Film) Bill, House of Representatives, *Weekly Hansard*, No. 16, 21–23 November 1989, pp. 2555–8.

BTCE (Bureau of Transport and Communications Economics) 1989, *The Pricing of Port Services*, Occasional Paper 97, AGPS, Canberra.

Button, J N (Minister for Industry, Technology and Commerce) 1988, Ministerial Statement on the Partnership for Development Program, Senate 1988, *Debates*, S 128, pp. 764–77.

— 1989a, *News Release*, 121/89, 10 September.

— 1989b, *News Release*, 30 October.

Button, J N (Minister for Industry, Technology and Commerce) and Bolkus, N (Minister for Consumer Affairs) 1989, *News Release*, No. 71/89, 8 June.

Button, J N (Minister for Industry, Technology and Commerce) 1990a, *News Release*, 12/90, 16 February.

— 1990b, *News Release*, 17/90, 28 February.

— 1990c, *News Release*, 19/90, 28 February.

— 1990d, *News Release*, 20/90, 1 March.

— 1990e, *News Release*, 52/90, 12 June.

— 1990f, *News Release*, 51/90, 13 June.

— 1990g, *News Release*, 85/90, 17 August.

Collins, R L (Minister for Shipping) 1990a, *Media Release*, 2/90, 4 May.

— (Minister for Shipping and Aviation Support) 1990b, *Media Release*, 5/90, 22 May.

— 1990c, Senate, *Weekly Hansard*, No. 4, 28 May–1 June 1990, p. 1305.

Collins, R L (Minister for Shipping and Aviation Support) and Willis, R (Minister for Finance and acting Minister for Industrial Relations) 1990, *Joint Statement*, 13/90, 12 July.

Commonwealth of Australia 1989, *New Directions for Commonwealth Fisheries Management in the 1990s: A Government Policy Statement*, AGPS, Canberra.

— 1990a, *Ecologically Sustainable Development*, Commonwealth Discussion Paper, AGPS, Canberra.

— 1990b, *Background Report on Liquefied Petroleum Gas*, AGPS, Canberra.

Cook, P F S (Minister for Resources) 1988, *Media Release*, PIE88/372C, 11 October.

Crean, S F (Minister Assisting the Treasurer) 1990a, *Press Release*, No. 44, 24 May.

— (Minister for Science and Technology) 1990b, *News Release*, 42/90, 28 May.

— 1990c, *Science and Technology Budget Statement 1990–91*, Budget Related Paper No. 7, AGPS, Canberra.

Dawkins, J S (Minister for Employment, Education and Training) 1990, Second Reading Speech on the Training Guarantee (Administration) Bill, House of Representatives, *Weekly Hansard*, No. 1, 8–10 May 1990, pp. 293–7.

Diewert, W E and Morrison C J 1986, 'Adjusting Output and Productivity Indexes for Changes in the Terms of Trade', *Economic Journal*, 96, pp. 659–79.

DITAC (Department of Industry, Technology and Commerce) 1988, *Australian Civil Offsets Program*, Guidelines for Participants, AGPS, Canberra, March.

— 1989a, *Australian Civil Offsets Program including Partnerships for Development, Annual Report 1988–89*, AGPS, Canberra.

— 1989b, *Explanatory Notes 1989–90*, Budget Related Paper No. 8.11, Canberra.

— 1990, *Explanatory Notes 1990–91*, Budget Related Paper No. 6.11.

DOD (Department of Defence) 1989a, *Doing Australian Defence Business*, Canberra, Directorate of Departmental Publications.

— 1989b, *Defence Report 1988–89*, AGPS, Canberra.

Domberger, S 1989, 'Competitive Tendering: How much can be saved?', *Business Council Bulletin*, No. 53, June, pp. 4–9.

DoTC (Department of Transport and Communications) 1990, *Explanatory Notes 1990–91*, Budget Related Paper No. 6.15.

Drought Policy Review Task Force 1990, *Final Report*, AGPS, Canberra.

Duffy, M J (Attorney-General) and Beddall, D P (Minister for Small Business and Customs) 1990, *News Release*, 23/90, 9 May.

Englander, A S and Mittelstadt, A 1988, 'Total Factor Productivity: Macroeconomic and Structural Aspects of the Slowdown', *Economic Studies*, No. 10, Spring, OECD.

EPAC (Economic Planning Advisory Council) 1989, *Productivity in Australia: results of recent studies*, Council Paper No. 39, AGPS, Canberra.

— 1990, *Microeconomic Reform: Progress in the 1980s and Council Members' Priorities for the 1990s*, Council Paper No. 42, AGPS, Canberra.

Garnaut, R 1989, *Australia and the Northeast Asian Ascendancy*, AGPS, Canberra.

GCA (Grains Council of Australia) 1990, *News Release*, 89/FU/10/64, 3 July.

Governor-General 1990, Senate, *Weekly Hansard*, No. 1, 8–11 May 1990, pp. 2–9.

Griffiths, A G (Minister for Resources) 1990a, *Petroleum Sector Initiatives*, AGPS, Canberra.

— 1990b, *Media Release*, PIE90/202G, 21 August.

Hahn, R W 1989, 'Economic Prescriptions for Environmental Problems: How the Patient Followed the Doctor's Orders', *Journal of Economic Perspectives*, 3(2), pp 95–114.

Haig, B D 1986, *The Comparative Productivity of Australian Industry*, Centre for Economic Policy Research, Discussion Paper, No. 142, ANU.

Hawke, R J L (Prime Minister) 1989, *Media Release*, 27 November.

— 1990a, 'Microeconomic Reform: the fourth term agenda', Speech at the Regent Hotel, Sydney, 22 February.

— 1990b, Opening Remarks to the 1990 Premiers' Conference, Canberra, 28 June.

— 1990c, 'Towards a closer partnership', Speech to the National Press Club, 19 July.

Helm, D and Pearce, D 1990, 'Assessment: Economic Policy Towards the Environment', *Oxford Review of Economic Policy*, 6(1), pp. 1–16.

IAC (Industries Assistance Commission) 1982, *Export Incentives*, Report No. 300, Canberra, AGPS.

— 1984, *Southern Blue-Fin Tuna*, Report No. 349, AGPS, Canberra, June.

— 1985a, *The Heavy Engineering Industry*, Report No. 375, AGPS, Canberra.

— 1985b, *Assistance to Manufacturing Industries 1977–78 to 1982–83*, Information Paper, AGPS, Canberra.

— 1986, *Annual Report 1985–86*, AGPS, Canberra.

— 1987a, *Assistance to Agricultural and Manufacturing Industries*, Information Paper, AGPS, Canberra.

— 1987b, *Annual Report 1986–87*, AGPS, Canberra.

— 1987c, *The Rice Industry*, Report No. 407, AGPS, Canberra.

— 1988a, *State Government Assistance to Agriculture*, AGPS, Information Paper, Canberra.

— 1988b, *Coastal Shipping*, Report No. 415, AGPS, Canberra, 20 July.

— 1988c, *Annual Report 1987–88*, AGPS, Canberra.

— 1989a, *Annual Report 1988–89*, AGPS, Canberra.

— 1989b, *Travel and Tourism*, Report No. 423, AGPS, Canberra.

IC (Industry Commission) 1990a, *Pulp and Paper: Bleaching and the Environment*, Report No. 1, AGPS, Canberra.

— 1990b, *Interim Report on Paper Recycling*, Report No. 2, AGPS, Canberra.

— 1990c, *Assistance under the passenger motor vehicle plan*, Information Paper, AGPS, Canberra.

— 1990d, *Aids and Appliances for People with Disabilities*, Report No. 3, AGPS, Canberra.

— 1990e, *Measuring the performance of selected government business enterprises*, Information Paper, AGPS, Canberra.

— 1990f, *Strategic Trade Theory: the East Asian Experience*, Information Paper (forthcoming).

ISC (Inter-State Commission) 1988, *Harmonisation of Road Vehicle Regulation in Australia*, AGPS, Canberra.

— 1990, *Road Use Charges and Vehicle Registration: A National Scheme*, AGPS, Canberra.

JCFADT (Joint Committee on Foreign Affairs, Defence and Trade) 1987, *The Management of Australia's Defence*, Parliamentary Paper No. 285/1987, AGPS, Canberra.

JCPA (Joint Committee of Public Accounts) 1986, *Review of Defence Project Management, Volumes 1 and 2*, AGPS, Canberra.

— 1987, *Implementation of the Offsets Program*, Report No. 270, AGPS, Canberra.

— 1990, *Review of the Finance Minute on Report 270 'Implementation of the Offsets Program'*, Report No. 305, AGPS, Canberra.

Jones, B O (Minister for Science, Customs and Small Business) 1989, *Media Release*, 143/89, 2 November.

Keating, P J (Treasurer) 1989a, *Press Release*, No. 76, 15 August.

— 1989b, *Press Release*, No. 96, 18 October.

— (Acting Prime Minister) 1990, *Media Release*, 26 April.

Keating, P J (Deputy Prime Minister) and Bowen, L F (Attorney-General) 1989, *News Release*, 21 December.

Keating, P J (Treasurer), Button, J N (Minister for Industry, Technology and Commerce), and Kerin J C (Minister for Primary Industries and Energy) 1989, *Press Release*, No. 19, 3 March.

Keating, P J (Treasurer) and Walsh, P A (Minister for Finance) 1989, *Budget Statements, 1989–90*, Budget Paper No. 1, AGPS, Canberra.

Keating, P J (Treasurer) and Willis, R (Minister for Finance) 1990, *Budget Statements 1990–91*, Budget Paper No. 1, AGPS, Canberra.

Kerin, J C (Minister for Primary Industries and Energy) 1990a, *Media Release*, DPIE 90/116K, 1 June.

— 1990b, Second Reading Speech on the Wool Marketing Amendment Bill, House of Representatives, *Weekly Hansard*, No. 3, 31 May–1 June 1990, pp. 1032–48.

— 1990c, *Media Release*, DPIE 90/167K, 23 July.

Manne, A S and Richels, R G 1989, 'CO_2 Emission Limits: An Economic Cost Analysis for the USA', mimeo, November (forthcoming in *The Energy Journal)*.

Marks, R E, Swan, P L, Dixon, P B, Johnson, D T, Mc Lennan, P and Schodde, R 1989, *The Feasibility and Implications for Australia of the Adoption of the Toronto Proposal for Carbon Dioxide Emissions*, Report to CRA Ltd, September.

MITI (Ministry of International Trade and Industry in Japan) 1990, *Interim Report on Improving the Quality of Life*, 9 May.

Morris, P F (Minister for Industrial Relations and Minister Assisting the Treasurer) 1989, Second Reading Speech on the Industry Commission Bill, House of Representatives, *Weekly Hansard*, No. 15, 30 October–2 November 1989, pp. 2422–8.

NACES (National Advisory Committee on Extension Services) 1989, *NIES — Future Directions*, A Report to the Australian Industry and Technology Council, September.

Nahan, M D 1986, *Environment: Conservation and Economics*, Critical Issues Paper No. 6, Australian Institute for Public Policy.

NSW (Government of New South Wales) 1990, *Microeconomic Reform: The NSW Government's Achievements*, June.

OECD (Organisation for Economic Co-operation and Development) 1987, *Monthly Statistics of Foreign Trade*, Paris, December.

— 1988, *Revenue Statistics of OECD Member Countries*, Paris.

— 1989a, *Environmental Policy Benefits: Monetary Valuation*, Paris.

— 1989b, *OECD Economic Surveys: New Zealand 1988/1989*, Paris.

— 1989c, 'Industrial Subsidies in OECD Countries', Working Party No. 1 of the Economic Policy Committee, CPE/WPI(89)7, September.

— 1989d, *OECD Economic Surveys: Japan 1988/1989*, Paris.

— 1990a, *OECD Surveys: Australia 1989/1990*, Paris.

— 1990b, *OECD Economic Outlook*, 47, June, Paris.

— 1990c, *Progress in Structural Reform*, Supplement to OECD Economic Outlook 47, Paris.

— 1990d, *National Accounts 1976–1988*, Paris.

O'Keeffe, P 1989, 'Who is Watching the Regulators?', *Business Council Bulletin*, No. 58, October, pp. 32–5.

Pearce, D, Markandya, A and Barbier, E B 1989, *Blueprint For a Green Economy*, Earthscan Publications.

PM&C (Department of the Prime Minister and Cabinet) 1990 *Cooperative Research Centres Program: Guidelines for Applicants*, AGPS, Canberra.

Porter, G F 1985, *Environmental Impact Assessment: A Practical Guide*, University of Queensland Press, Queensland.

Porter, M E 1990, *The Competitive Advantage of Nations*, Macmillan, London.

PSA (Prices Surveillance Authority) 1989, *Inquiry into Book Prices*, Final Report, 19 December.

— 1990a, *Inquiry into Coastal Shipping Freight Rates*, Report No. 27, 30 March.

— 1990b, *Inquiry into Proposed Port Congestion Surcharge For Cargo Handling at Sydney*, Report No. 28, 12 April.

— 1990c, *Review of LPG Pricing*, Report No. 29, 30 June.

RIC (Railway Industry Council) 1990, *Rail into the 21st Century*, AGPS, Canberra, May.

Richardson, G F (Minister for the Arts, Sport, the Environment, Tourism and Territories) 1989, *Media Release*, 27 September.

Saxonhouse, G R 1983, 'The Micro- and Macroeconomics of Foreign Sales to Japan' in Cline, W (ed) *Trade Policy in the 1980s*, Institute for International Economics, Washington DC.

SIRA (Shipping Industry Reform Authority) 1990, *Progress on Shipping Reform: Second Six Monthly Report*, June.

Smith, F L 1990, 'Environmental Protection: is there a better way?', *Economic Witness*, No. 46, Australian Institute for Public Policy.

SRA (State Rail Authority of New South Wales – Cityrail) 1989a, *Diagnostic and Strategic Direction*, February.

— 1989b, *A New Strategic Direction for Cityrail*, May.

STA (State Transport Authority of Victoria) 1988, *Draft Final Report STAP (State Transport Authority Plan)*, Melbourne, April.

Stoeckel, A, Pearce, D and Banks, G 1990, *Western Trading Blocs*, An independent report commissioned by the Confederation of Asia–Pacific Chambers of Commerce and Industry, Centre for International Economics, Canberra.

TCFDA (Textiles Clothing and Footwear Development Authority) 1989, *Review of the Textile Yarn Bounty Administration*, Discussion Paper, September.

Thwaites, R M A 1989, *Investment Opportunities in the Australian Pharmaceutical Industry and the Factor F Scheme*, Australian Pharmaceutical Manufacturers Association, December.

Treasury 1989, *Tax Expenditures Statement*, AGPS, Canberra.

West, S J (Minister for Administrative Services) 1989, Ministerial Statement on Major Reforms to Government Purchasing, House of Representatives, *Weekly Hansard*, No. 13, 3–5 October 1989, pp. 1264–70.

White, D R (Minister for Industry, Technology and Resources, Victoria) 1989, *Victorian Parliamentary Debates*, 1st Session, No. 4, 19–20 September, pp. 440–1.

Willis, R (Minister for Transport and Communications) 1989a, Ministerial Statement on Reform of the Shipping and Waterfront Industries, House of Representatives, Weekly Hansard, No. 8, 29 May–1 June 1989, pp. 3454–62.

— 1989b, *Media Statement*, 15 June.

— 1990a, *Media Release*, 18/90, 19 February.

— (Minister for Finance) 1990b, *Media Release*, 37/90, 21 August.

WIRA (Waterfront Industry Reform Authority) 1989, *In-principle Agreement: Stevedoring and International Container Depot Industries*, AGPS, Canberra.

— *First Six Month Report*, April 1990.

World Bank 1987, *World Development Report 1987*, Washington DC.

— 1989, *The World Bank Annual Report 1989*, Washington DC.

World Commission on Environment and Development 1987, *Our Common Future*, Oxford University Press, Oxford.

World Economic Forum and IMEDE 1989, *The World Competitiveness Report 1989*, Lausanne, Switzerland.

WRC (Wool Review Committee) 1990, *Inquiry Information and Issues*, September.